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THE

SIMPLEX HANDBOOK

OF

DENTAL MATERIA MEDICA AND THERAPEUTICS.

THE
SIMPLEX HANDBOOK OF
DENTAL MATERIA MEDICA & THERAPEUTICS

A simple tabulated classification of drugs and remedies used in Dental Operations
and in the treatment of Dental Diseases

Specially adapted to the requirements of Students and Busy Practitioners

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ADDITIONS AND ALTERATIONS

to conform with the British Pharmacopœia, 1914.

DOSES.

Antifebrin, 2 to 5 grains.
Strychnine $\frac{1}{64}$ to $\frac{1}{16}$ grain.
Tincture of Aconite, 2 to 5 minims.
Tincture of Strophanthus, 2 to 5 minims.
Solution of Morphine Tartrate (Hypodermic) 5 to 10 minims.

N.B.—In some cases the doses in the text are intentionally modified.

STRENGTHS.

Weaker—

Ac. Carbolic Liquid contains 15 per cent of water.
Solution of Morphine Tartrate (Hypodermic) contains 2·5 per cent. of Tartrate of Morphine.
Solution of Potash contains 5 per cent. of Potassium Hydroxide.

Stronger—

Tincture of Strophanthus is four times the strength of the 1898 Tincture.

NEW LATIN NOMENCLATURE.

Barbitonum - - -	*vide*	Veronal
Benzamine Lactas -	,,	Eucaine Lactas.
Liquor Cresol Saponatus	,,	Lysol.
Liquor Formaldehydi -	,,	Formalin.
Methyl Sulphonal - -	,,	Trional.
Tinctura Iodi Fortis	*replaces*	Liquor Iodi Fortis, p. 117
Tinctura Iodi Mitis -	,,	Tinctura Iodi, p. 142.

ERRATA.

Glauber Salts, p. 44, *for vide* Soda Sulphate, *read* Salts, Glauber.

Magnesium Sulphate, p. 65, *for vide* Epsom Salts, *read* Salts, Epsom.

Carron Oil, *see* Oil, Linseed, p. 75.

After Liquor Ferri Perchloridi, p. 144, *read vide* Solution of Perchloride of Iron.

Putty Powder, *for vide* Oxide of Tin, *read* Tin, Oxide of.

Solution of Morphine Acetate, *dose* 10 to 60 minims.

Solution of Morphine Hydrochlor, *dose* 10 to 60 minims.

PREFACE.

The aim of the SIMPLEX HANDBOOK is to provide dental students and busy practitioners with that knowledge of drugs and remedies which is necessary for them either for examination purposes or every day practice.

We have long realised the need of such a book, easy for reference, and free from packing and a superfluity of words and matter that is of no interest, or of only a slight theoretical interest to the dentist.

Many drugs which appear in the dental Materia Medica text books have been purposely omitted, as too great a choice of remedies leads to confusion, especially where some of these are of doubtful value only.

It is hoped that the alphabetically-arranged tables will be appreciated, as the absence of any such attempt at classification in any other book on the subject has always made the acquiring of a useful and practical knowledge of dental Materia Medica exceedingly arduous, if not almost impossible.

The arrangement of the tables leaves ample room in the body of the book for the reader to make his own notes, and thus enhance the value of the handbook.

As far as we are aware, no classification of agents used in dental Histology has ever yet been attempted. The want of such a classification is apparent, and should prove a boon, especially to the student. We make no apology for introducing this section into the handbook, as the value of a knowledge of dental Histology has recently been demonstrated during research on the nerve supply of the dental tissues.

There can be no question as to the need of such a work as we present under the title of "THE SIMPLEX HANDBOOK OF DENTAL MATERIA MEDICA AND THERAPEUTICS." Whether we have been able to present it satisfactorily we must leave to the dental profession and to those interested in the spread of knowledge amongst the students and members of the profession to decide.

40, HARLEY STREET, W.
July, 1914.

WESLEY BARRITT.
ALFRED BARRITT.

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PART I.

MATERIA MEDICA TABLE.

DRUGS AND REMEDIES ALPHABETICALLY ARRANGED UNDER THE NAMES BY WHICH THEY ARE COMMONLY KNOWN.

MATERIA MEDICA TABLE.

* Signifies—Also given internally in General Medicine.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ACETONE	Acetonum	A colourless, volatile liquid, with a peculiar empyreumatic odour. Miscible with water and alcohol.	As a dehydrant, particularly recommended in root canal treatment before filling with paraffin.		Dimethyl - ketone (CH$_3$–CO–CH$_3$). Prepared by heating Calcium Acetate.
ACIDS					
BORACIC	Acidum Boracicum Acidum Boricum	White, pearly, laminar crystals; odourless and unctuous to the touch—also in white powder. Readily soluble in hot water (1 in 3), slowly soluble in cold water (1 in 26), but more so in water to which Glycerine (1 in 5) has been added.	Antiseptic and antiputrefactive. As a mouth-wash—2 drs. in 8 ozs. water. As a lotion—saturated solution. As a dusting powder–pure fine powder.		A weak acid obtained by the reaction of Sulphuric Acid and Borax. It is also found native.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
BENZOIC	Acidum Benzoicum	White or slightly yellow scales or needle-shaped crystals. Aromatic odour and taste. Slightly soluble in alcohol, and in alkaline solutions forms Benzoates.	Antiseptic. As a Mouth-wash—2 grs. to 1 oz. (*vide* Sodium Benzoate). As an Inhalation—5-10 grs. in a pint of boiling water.	*	Obtained from Gum Benzoin by sublimation, and prepared synthetically from Toluene.
CARBOLIC, LIQUID (PHENOL)	Acidum Carbolicum Liquidum. Acidum Phenicum Liquidum	Colourless or slightly pinkish liquid, having a sp. gr. 1·064-1·067 at 60° F. Has an acrid burning taste. Soluble 1 in 5 in water, (*vide* Poison Table).	Powerful antiseptic, antiputrefactive and disinfectant. Coagulant and analgesic. Obtundent to sensitive dentine. Caustic to exposed pulps. Relieves continued pain after extraction, when applied pure on a pellet of wool. As a mouth-wash—2%, or 2 drs. in 8 oz. *contd.*	*	Carbolic Acid liquefied by the addition of 10% of water.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CARBOLIC (*contd.*)			As a Lotion—5%, and diluted when used. As an Ointment—Ung. Ac. Carbolic B.P.		
CHROMIC	Acidum Chromicum	Deliquescent, crimson, acicular or columnar crystals without odour. Powerful oxidising agent. Freely soluble in water.	Escharotic. As an application, a 10% solution, in ulcerative stomatitis, gingivitis, glossitis, and to pyorrhœa pockets (*vide* also Histological Section).		Produced by the action of Sulphuric Acid on Bichromate of Potash. Explodes violently if mixed with Glycerine, Alcohol, Ether, and some other organic substances.
FLUORIC	Acidum Hydrofluoricum	A colourless liquid, strongly corrosive, giving off a pungent, irritating vapour. Usually stored in gutta percha bottles on account of its action on glass. Freely soluble in water.	Used for etching porcelain inlays. Should be handled with care.		Obtained by heating together strong Sulphuric Acid and Calcium Fluoride.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
FORMIC (*vide* Histological Section)					
GALLIC	Acidum Gallicum	White or pale fawn coloured silky needles. Odourless and with an astringent taste. Sparingly soluble in cold water.	Astringent and Hæmostatic.	2-10 grains in cachets, repeated as required	Prepared from Galls.
HYDRIODIC (*vide* Syrup)					
HYDRO-CHLORIC (MURIATIC)	Acidum Hydrochloricum	Clear or yellowish, fuming, corrosive liquid (*vide* Poison Table).	Laboratory and Workroom.		Prepared by the action of Sulphuric Acid on Sodium Chloride. Spirits of Salts is commercial Hydrochloric Acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
LACTIC	Acidum Lacticum	A colourless, syrupy liquid, inodourous and with an acid taste. Miscible with water, glycerine and alcohol.	Mild caustic and stimulant. Tartar solvent. As a Paint—15 mins. —1 oz. Glycerine, in chronic gingivitis. A 75% solution may be injected warm into Pyorrhœa pockets. (*vide* Histological Section).		Prepared chiefly by fermentation of Lactose and subsequent purification.
NITRIC	Acidum Nitricum	A strongly corrosive, fuming, caustic liquid (*vide* Poison Table).	Escharotic in gangrenous stomatitis. Laboratory and Workroom. (*vide* Histological Section).		Prepared by distillation from Nitrate of Potash or Soda with diluted Sulphuric Acid.
OSMIC	Acidum Osmicum	A pale yellow crystalline substance giving off an excessively irritating vapour.	A 1 or 2% solution may be injected hypodermically in trigeminal neuralgia. (*vide* Histological Section).	4-10 mins. of Sol. Hypodermically	Osmium tetroxide $Os\ O_4$.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
PICRIC (*vide* Histological Section.					
PHENOL-SULPHONIC	Acidum Phenolsulphonicum	A reddish, volatile, viscous liquid. Dissolves readily in Water, Alcohol and Glycerine.	Escharotic, in caries or necrosis of bone, chronic alveolar abscesses, and pyorrhœa alveolaris. A 3% solution is used as a paint in chronic gingivitis and pyorrhœa.		Formed by the action of Sulphuric Acid on Carbolic Acid.
SULPHURIC	Acidum Sulphuricum	A colourless, heavy, oily liquid without odour. Strongly corrosive.	A 50% solution is used to neutralise the contents of putrescent root canals, for enlarging fine and tortuous canals and for dislodging pulp nodules. Laboratory and workroom. (*vide* Histological Section).		Produced by the combustion of Sulphur and the oxidation and hydration of the resulting Sulphurous Acid gas by means of nitrous and aqueous vapours.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SULPHURIC, AROMATIC	Acidum Sulphuricum Aromaticum	A spirituous solution of brownish colour, having an acid, aromatic taste.	May be used when scaling the teeth, to remove calcareous deposits round the necks and under the gum margin.	*	A 12½% Alcoholic and Aromatic Solution of Sulphuric Acid.
TANNIC	Acidum Tannicum	Pale yellow vesicular masses or glistening scales. Strongly astringent taste. Readily soluble in water and alcohol.	Hæmostatic and Astringent. As a styptic may be applied in powder form on a pellet of wool. As a spray, mouth wash, paint, or gargle in combination with Glycerine and Alcohol for gingivitis, stomatitis, laryngitis, and pharyngitis. (*vide* Glycerine and Tannin). With Carbolic Acid for hardening softened dentine and devitalised pulps.	2-10 grs. in an aqueous solution.	Obtained from galls by maceration with Ether.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TRICHLOR-ACETIC	Acidum Trichlor-aceticum	Deliquescent, rhombohedral, coalescent crystals. Readily soluble in water and alcohol.	Escharotic, antiseptic, astringent and styptic. For application to indolent ulcers and mucous patches a 5-10% solution may be used. A 15% solution forced through a sinus in chronic alveolar abscess and into a stubborn pyorrhœal pocket has a powerful stimulating effect. A 15% solution applied on cotton wool prevents oozing from the gum during the fitting of crowns, pivots or inlays. A 25% solution is used as a Tartar Solvent.		Prepared by acting on Chloral Hydrate with Nitric Acid in sunlight.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description
ADRENALIN CHLORIDE, LIQUID	Liquor Adrenalini Chloridi	Almost colourless liquid changing to pale brown. Very unstable. Its activity is destroyed by boiling. Various artificial and chemically pure substitutes have been introduced under trade names, as Adrenine and synthetic Suprarenin. These are claimed to be superior on account of their stable nature.	Hæmostatic. Vaso-constrictor, hence its use in local anæsthetics. Pressure anæsthesia in conjunction with cocaine. Cardiac tonic when given intravenously in shock.	Average dose in local anæsthetics, 1 minim. 10 minims intravenously in shock.	Prepared from the active principle of the suprarenal gland and containing 1 part of Adrenalin Chloride, 5 parts of Chloretone in 1,000 parts of normal Saline Solution.
AETHER	Aether Sulphuricum	A colourless, mobile and very volatile liquid with a characteristic odour and sweetish taste. Soluble in alcohol. Highly inflammable.	Cardiac stimulant. General anæsthetic. Spray for obtunding sensitive dentine (*vide* Histological Section.)	15 minims. In general anæsthesia about 1 oz.	Prepared from Alcohol by destillation with Sulphuric Acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
AGAR-AGAR	Ploearia Lichenoides	Has the typical appearance of dried seaweed. Is supplied for convenience in powder form.	A prepared jelly is used as the basis for many culture media for bacteria.		Malayan name for a seaweed—Ploearia lichenoides.
ALCOHOL, ABSOLUTE	Alcohol Ethylicum	A colourless volatile liquid Sp. Gr. ·797-800. Has a pungent odour and burning taste. Contains 1% of water. Inflammable	Dehydrant, detergent, antiseptic and styptic. A positive antidote to Phenol. Is used as a hypodermic injection in trigeminal neuralgia (*vide* Histological Section.)		Prepared from Rectified Spirit (*q.v.*) by dehydration.
ALUM	Alumen	Large, colourless, odourless, octahedral crystals with a sweetish and strongly astringent taste.	Astringent. For hardening the mucous membrane of edentulous mouths. Should not be used indefinitely when		A Potassium or Ammonium sulphate of Aluminium crystallised from aqueous solutions.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ALUM *(contd.)*		Soluble 1 in 10 parts of water.	teeth are present. Styptic and caustic to indolent ulcers. A plug of wool soaked in Carbolised Resin may be dipped in the powder for plugging obstinately bleeding sockets. Emetic. As a mouth-wash—1 dr. in 10 oz. of water, with Glycerine (½ oz.)	As an emetic 1-2 drams	
ALYPIN	Alypinum	A non-hygroscopic odourless crystalline powder. Soluble 1 in 1 of water. Solutions may be boiled without interfering with its action.	Local anæsthetic in solutions of ½ to 2 %.		Primary Benzoyl-tetramethyldiaminoethylmethyl Carbinol Mono-hydrochloride.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
AMMONIA (*vide* Spirit & Solution of)					
AMMONIUM BIFLUORIDE	Ammonium Bifluoridum	Colourless crystals soluble in water.	A 2 % solution is used as a solvent for calcareous deposits and a tissue stimulant. Inject with a syringe having a platinum point (Dunn). Protect tissue against burns. Does not dissolve enamel or cementum.		Prepared by the interaction of Hydrofluoric Acid and Ammonium Carbonate. Also known as Fluoram.
AMYL NITRITE	Amyl Nitris	A yellowish ethereal liquid with a peculiar not disagreeable odour. Deteriorates by exposure to air.	Vaso-motor dilator. As an inhalation from glass capsules in convulsions, syncope and collapse.	As inhalation 2-5 minims	Produced by the action of Nitric or Nitrous Acid on Amyllic Alcohol.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ANISEED (*vide* Oil of)					
ANTIFEBRIN	Acetanilidum	Small white odourless glittering crystals; produces a burning sensation on the tongue. Almost insoluble in cold water. Soluble in spirituous solutions.	Febrifuge, antipyretic, hypnotic, sedative and nerve tonic.	2-10 grains in cachets or tablets	Obtained by the action of Glacial Acetic Acid on Aniline.
ANTIPYRIN	Phenazonum	Pearly white crystalline scales or in powder. Has a bitter taste. Very soluble in water.	Analgesic and febrifuge, in neuralgia and migraine. Has valuable astringent and anodyne properties. A 10 % solution is useful for painting inflamed areas. (*contd.*)	5-10 grains (official dose 3-20 grains)	Obtained from Phenyl Hydrazine

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ANTIPYRIN (*contd.*)			A 2 % solution as a mouth-wash and gargle has been found to have a lasting anodyne effect.		
APOMORPHINE HYDROCHLORIDE	Apomorphinae Hydrochloridum	Minute pale greyish white acicular crystals, odourless and having a slight bitter taste. Soluble (1 in 50) of water.	Powerful emetic. (*vide* Injection).	$\frac{1}{20}$-$\frac{1}{4}$ grain. $\frac{1}{25}$-$\frac{1}{6}$ grain hypodermically.	Obtained by heating Morphine or Codeine in sealed tubes with HCl or $ZnCl_2$.
ARGYROL	Argyrol	Fine black odourless glistening hygroscopic scales. Soluble in water, insoluble in alcohol.	Antiseptic, germicide, astringent. May be used as a lotion ($\frac{1}{2}$ to 1 %) for antral and alveolar abscess irrigation. (*contd.*)		Contains 30 % of Silver combined with a Cereal Protein.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ARGYROL *(contd)*.			For stomatitis and gingivitis a 10-50% solution is recommended as a paint, and is specially indicated in the treatment of pyorrhœa alveolaris after instrumentation. It causes little or no irritation to mucous membrane and possesses deep penetrating powers.		
ARSENIC	Acidum Arseniosum	Heavy white powder, sparingly soluble in cold water, odourless and tasteless. On heating in a glass tube it slowly sublimes into minute crystals. (*vide* Poison Table).	Escharotic. Devitalises pulp tissue. (Salvarsan (606) is a preparation containing Arsneic and is said to be a specific for Syphilis.)	$\frac{1}{60}$-$\frac{1}{12}$ gr.	An anhydride obtained by roasting arsenical ores and purifying by sublimation.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ASPIRIN	Aspirinum	Small colourless, odourless acicular needles, with an acid taste. Also in white powder. Slightly soluble in cold water.	Analgesic and Febrifuge. Gives marked relief in all affections of the fifth nerve, in acute Rheumatism and in cases of Pyorrhœa Alveolaris associated with Rheumatism.	5-15 grs. in cachets	Acetyl-Salicylic Acid.
ATROPINE SULPHATE	Atropinae Sulphas	A white odourless, crystalline powder with a bitter acrid taste. (*vide* Poison Table).	Used hypodermically for the treatment of Shock and Collapse. As an antidote for poisoning by certain narcotic drugs. An antisialagogue. $\frac{1}{100}$ gr. every 4 or 6 hours until relieved in Mercurial Stomatitis.	$\frac{1}{200}$ - $\frac{1}{100}$ gr. and in tablets of standard strength for hypodermic use	Prepared from Atropine — the Alkaloid of Belladonna — by the action of Sulphuric Acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
BALSUM OF PERU	Balsamum Peruvianum	A blackish syrupy liquid with an agreeable balsamic odour, and acrid taste. Insoluble in water, soluble in chloroform and alcohol.	Mild antiseptic stimulant. In Pyorrhœa, fill pockets by inserting needle of syringe to the bottom of the pocket. Use once or twice a week, after thorough irrigation.	*	A balsam exuded from the trunk of the Pereira tree.
BELLADONNA (*vide* Extract, Liniment & Tinct.)					
BISMUTH NITRATE	Bismuthi Nitras	White odourless crystalline substance decomposed by water forming Bismuth Subnitrate and Nitric Acid.	Stimulant in dento-alveolar sinuses, pyorrhœa pockets and chronic abscess cavities in form of paste 20 %.		Prepared by the action of Nitric Acid on Bismuth.

NAME.	LATIN NOMENCLATURE	CHARACTERS	USE.	DOSE.	DESCRIPTION.
BISMUTH OXIDE	Bismuthi Oxidum	A pale yellowish-white amorphous powder. Insoluble in water.	Antiseptic. Incorporated with hard paraffin makes an excellent root filling.	✶	Prepared by the interaction of Bismuth Oxynitrate and Sodium Hydroxide solution at a boiling heat.
BISMUTH SUBNITRATE	Bismuthi Subnitras	A heavy white, colourless, crystalline powder. Insoluble in water or alcohol.	Sedative and astringent both internally and externally. Recommended in irritative dyspepsia and gastric ulcer.	5-20grains in cachet	Prepared by the action of water on Bismuth Nitrate.
BLACK DRAUGHT	Mistura Sennae Composita	Dark brown liquid with pleasant aromatic odour.	Laxative, purgative, cathartic.	1 to 2 ounces	A mixture containing Epsom Salts and Senna with flavouring agents.
BORAX	Sodii Biboras	Colourless crystals or white powder, inodourous and with a sweetish alkaline taste. *(contd.)*	Alkaline and antiseptic. Useful in stomatitis as a mouth wash 6 %.	✶	Found native. May be prepared by boiling together Boracic Acid and Carbonate of Soda

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
BORAX (*contd.*)		Soluble 1 in 25 of water.	For sterilising instruments add 1 dr. to 1 pint of water. Used in the laboratory as a flux.		
BROMIDES (*vide* Potassium & Sodium)					
BROMURAL	Bromural	White platelets having a slightly bitter taste. Soluble in hot water.	Sedative, Hypnotic. One or two tablets may be given to timid, nervous or obstinate patients, half an hour before local anæsthesia.	5 to 10 grains in tablets or cachets	Urea Monobromine Isovalerianate.
CAFFEINE CITRATE	Caffeinæ Citras	Fine white odourless powder with an acid and somewhat bitter taste. Slightly soluble in water.	Cardiac tonic. One grain doses in Migraine, alone or with Phenacetin. Should be given with caution as its action on the heart is cumulative.	½-5 grains in powder or cachets	The Citrate of Caffeine, the alkaloid obtained from the Tea and Coffee plants.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CALCIUM CHLORIDE	Calcii Chloridum	White agglutinated masses or in crystals. Very deliquescent, odourless. Freely soluble in water.	Increases the coagulability of the blood in Hæmophilia and small persistent hæmorrhages. Where much bleeding is anticipated after extractions 10 grain doses may be given during the preceding week.	5-20 grns. 10 grains in 1oz. of water 2 or 3 times daily is recommended.	Prepared by neutralising Hydrochloric Acid with Calcium Carbonate.
CALCIUM LACTATE	Calcii Lactas	Opaque, white, crystalline powder. Soluble in water when freshly prepared.	Recommended in Hæmophilia and before operating on patients who bleed unduly, as it increases the coagulability of the blood.	3-10 grns.	Prepared by neutralising Lactic Acid with Calcium Carbonate.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CALOMEL (*vide* Mercury Sub-Chloride).					
CAMPHOR	Camphora	White translucent masses, of a tough consistence and crystalline structure. Sparingly soluble in water, freely in alcohol.	An ingredient in some preparations for root canal treatment, in Liniments (*q.v.*) for Neuralgia and in Camphorated Chalk. When mixed with many crystalline substances, causes liquefaction and forms useful applications *e.g.* Camphor 4 Phenol 12 Water 1. Camphor 1 Chloral Hydrate 1. Camphor 2 Menthol 3. Camphor 1 Thymol 1. Camphor 2 Salol 3.	*	A Stearoptene obtained from the wood of the Camphor tree.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CAMPHORATED OIL		*vide* Liniment of Camphor.			
CAMOMILES	Flores Anthemidis	The dried yellow single and double flowers.	Sedative in inflammatory conditions. In acute abscesses may be used as a poultice mixed with crushed Poppy Heads. For rinsing the mouth a decoction should be made and used as hot as possible (½oz. Flowers to 10 oz. Water). The essential oil *q.v.* is an antiseptic and obtundent.		Flowers of the Anthemis Nobilis.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CANADA BALSAM		*vide* Histological Section.			
CANNABIS INDICA		*vide* Tincture of.			
CAPSICUM	Fructus Capsici	The dried ripe fruit, deep red in colour, with a hot burning taste.	Rubefacient, in official liquid preparations. Chiefly used as a counter irritant in the form of dental plasters for application to the gum.		The dried ripe fruit of the Capsicum plant.
CARMINE	Carminum	Deep red lumps or powder. Soluble in ammoniacal solutions.	For colouring dentifrices. (*vide* Histological Section).		The colouring matter obtained from Cochineal.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
CHALK, CAMPHORATED	Creta cum Camphora	White powder with strong camphoraceous odour.	Tooth Powder.		Flowers of Camphor 1 part. Precipitated Chalk 7 parts.
FRENCH	Creta Gallica	A smooth white powder or lumps of greyish colour.	Used in the laboratory as a separating powder.		Found native.
PRECIPITATED	Creta Precipitata (Calcii Carbonas)	White crystalline powder, odourless and tasteless. Almost insoluble in water.	Used largely in tooth powders and pastes. Care should be taken that it is as fine as possible as its crystalline nature varies considerably (*vide* Prepared Chalk). N.B. — Camphorated Chalk and Carbolic Tooth Powder are said to have an injurious effect on the enamel. This is largely due to the abrasive effect of the chalk used.		Prepared by precipitation from solution of Calcium salts.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CHALK, PREPARED	Creta preparata (Calcii Carbonas)	White amorphous powder, odourless and tasteless. Insoluble in water.	Is more suitable than the Precipitated Chalk for use in Tooth Pastes. May be used in powders, but as it does not make a very presentable preparation, a little Carbonate of Magnesia (1 in 6) may be added. Also used in silver cleaning preparations.	*	Native friable Carbonate of Calcium freed from impurities by elutriation.
CHARCOAL, PREPARED	Carbo Animalis	Fine black powder, odourless and almost tasteless. Insoluble in water and alcohol.	Used as an ingredient in tooth-powders or may be used alone. N.B.—Vegetable charcoal (Carbo Ligni) should on no account be used, because of its crystalline nature.		The residue of bones which have been exposed to a red heat without the access of air and from which the earthy salts have been removed.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CHEMICAL FOOD	Syrupus Ferri Phosphatis Composita	A dark red syrupy liquid, sweet and slightly metallic to the taste.	Tonic specially suitable for children.	$\frac{1}{2}$ to 2 drs. in water immediately after meals.	A compound syrup of the Phosphates of Iron, Calcium and Potassium.
CHINOSOL	Chinosol	A yellowish crystalline powder. Slight odour, disagreeable taste. Soluble in water.	Powerful antiseptic, disinfectant and deodorant. Used externally as a lotion (1-10) for washing chronic abscesses and sores, but is not recommended for use in the mouth. A weak solution for sterilising instruments.		Potassium Oxychinoline Sulphonate.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CHLORAL HYDRATE	Chloral Hydras	Colourless, transparent crystals. Aromatic penetrating odour, bitterish caustic taste. Freely soluble in water. (*vide* Poison Table).	Hypnotic. Combined with Bromide of Potassium is a good sedative in neuralgia.	5-20 grs. 10 grs. with 10 grs. of Potass. Brom. in 1½ ozs. of water at bed-time.	Obtained by the action of Chlorine Gas on Alcohol and the subsequent addition of water.
CHLORAL HYDRATE, BUTYL	Butyl-Chloral Hydras	White pearly scales, with pungent odour and acrid nauseous taste. Sparingly soluble in water. (*vide* Poison Table).	An efficacious nerve sedative in facial neuralgia.	2-15 grs. in pills or cachets. A 3 gr. dose may be given every two hours until relieved.	Prepared by acting on Paraldehyde with Chlorine Gas.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
CHLORAL CAMPHOR	Chloral Camphora	Clear syrupy liquid of peculiar odour and taste.	Anodyne. Useful as an external application in acute inflammation and neuralgia.		A mixture of equal parts of Chloral Hydrate and Camphor.
CHLORAL-AMIDE	Chloral-amidum	Colourless, odourless, shining crystals, with a faintly bitter taste. Slightly soluble in water.	Hypnotic. Is said to have less influence on the heart than Chloral.	20-50 grs. in powders or cachets.	A compound of Chloral Anhydride and Formamide.
CHLORETONE	Chloretonum	Light white glistening crystals, with a strong camphoraceous odour and taste. Volatile at ordinary temperatures. Sparingly soluble in water, readily soluble in Alcohol, Glycerine and Clove Oil.	Hypnotic and local Anæsthetic, Analgesic and Anodyne, mild obtundent of sensitive dentine. Has been found to have marked astringent properties, and may be advantageously used for plugging persistently bleeding tooth sockets.	5-20 grns.	Obtained by the interaction of Chloroform, Acetone and an Alkaline Hydroxide.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
CHLORIC ETHER		*vide* Spirits of Chloroform.			
CHLORODYNE	Chlorodynum	Dark syrupy liquid with taste of liquorice and peppermint.	Sedative, Narcotic. Useful in neuralgic pains preventing sleep.	5 to 15 drops.	10 drops contains Morphia Hyd. $\frac{1}{11}$ grn., Chloroform $\frac{3}{4}$ minim., Acid Hydrocyanic, dil. $\frac{1}{2}$ minim.
CHLOROFORM	Chloroformum	Heavy, clear, colourless, mobile and diffusible liquid having a characteristic odour and burning sweet taste. Sparingly soluble in water, freely soluble in alcohol.	General anæsthetic. Constituent of many liniments. Solvent of Gutta Percha and Rubber. Sweetening agent in some liquid dentifrices. (*vide* Spirits and Water of Chloroform).	For Anæsthetic purposes about $\frac{1}{2}$ fl. oz.	Prepared by distillation of Alcohol in the presence of Slaked and Chlorinated Lime.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
COBALT, SALTS OF	Cobaltum	The more stable salts (cobaltous) are red when hydrated and blue when dehydrated.	Various salts have been used for devitalising pulp tissue, their action is, however, probably due to the Arsenic which they contain.		Occurs chiefly in the native state in combination with Arsenic.
COCAINE HYDROCHLORIDE	Cocainæ Hydrochloridum	Light, shining, lamellar crystals free from odour and having a slightly bitter taste, leaving a sensation of numbness on the tongue. Very soluble in water.	Local anæsthetic in solutions of ½-1 %. For pressure anæsthesia, a crystal may be used in conjunction with Adrenalin. Used by Cataphoresis.	*	The Hydrochloride of the alkaloid obtained from the leaves of the Coca plant.
COCAINE LACTATE	Cocainæ Lactas	Light, shining, lamellar crystals free from odour and having a slightly bitter taste, leaving a sensation of numbness on the tongue. Very soluble in water.	Local anæsthetic in solutions of ½-1 %. For pressure anæsthesia, a crystal may be used in conjunction with Adrenalin. Used by Cataphoresis.	*	The lactate of the alkaloid Cocaine.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
COCOA BUTTER	Oleum Theobromatis	A pale yellow fatty solid, having the odour of cocoa, and melting at the body temperature (98·4 F°).	Lubricant. Prevents scratching when used on discs and strips for polishing fillings.		Obtained by expression and heat from the seeds of the cocoa plant.
COCHINEAL	Coccus Cacti	An ash grey granular looking substance, without odour.	Used as a colouring agent when powdered for various forms of dentifrices. (Carmine *q.v.* is the active colouring principle, and is recommended for use in preference to Cochineal).		The dried fecundated insect, Coccus Cacti, reared on the trees of the Nopalea species.
CODEINE PHOSPHATE	Codeinæ Phosphas	White crystalline powder, odourless and of bitter taste. Soluble 1 part in 4 of water (*vide* Poison Table).	Narcotic, sedative, analgesic. Hypodermic injections, 1 gr. in 6 mins. of water, given to relieve intense pain. (*contd.*)	$\frac{1}{3}$-2 grs. in pill, cachet or syrup	Obtained by the action of Phosphoric Acid on Codeine, an Alkaloid of Opium.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CODEINE PHOSPH. *(contd.)*			The Codeine Salts are less active than the Morphia Salts, but freer from after effects.		
COLLODION	Collodium	A colourless syrupy liquid, highly inflammable, and having a strong ethereal odour.	As an application to wounds forms a protective covering either alone or in conjunction with gauze dressing.		A solution of Pyroxylin in Ether and Rectified Spirit.
COLLODION FLEXILE	Collodium Elacticum	As Collodion, but of a thicker consistence and cracks less readily.	As Collodion, but makes a stronger dressing. Collodion also serves as a vehicle for various Styptics as Tannic Acid, Antiseptics as Carbolic Acid, and Anodynes as Aconite.		Collodion to 12 ozs. of which is added Canada Balsam ½ oz. and Castor Oil ¼ oz.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
COPPER SULPHATE	Cupri Sulphas	Deep blue transparent crystals, having a metallic taste. Freely soluble in water.	Astringent, escharotic, antiseptic, emetic. A 2 to 4% solution is used in Ionic medication. Its use is indicated in ulcerative stomatitis, indolent ulcers, pyorrhœal pockets, applied in the form of a stick, in powder, or in concentrated solution on wool. In actinomycosis irrigations of 1% solutions are recommended, and doses of ¼ increasing to 1 gr. may be given thrice daily.	¼-1 gr. As an Emetic 5-20 grs.	Prepared by the action of Sulphuric Acid on Copper.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
COPPER OXIDE	Cupri Oxidum	A heavy dark brown or black powder, insoluble in water and alcohol.	Antiseptic. An ingredient in Oxyphosphate of copper cements.		Prepared by the oxidation of pure copper.
CORROSIVE SUBLIMATE (*vide* Mercuric Chloride)					
CREAM OF TARTAR	Potassii Tartras Acidus	Colourless or slightly opaque rhombic crystals; also in white crystalline, gritty powder.	Used in tooth pastes to increase the flow of saliva, and in this way is said to render the teeth immune to caries.		The purified deposits obtained during vinous fermentation.
CREOSOTE	Creosotum	A faintly yellow oily liquid, having a smoky odour and burning taste. Mixes in all proportions with alcohol and glycerine.	Deodoriser, antiseptic, antiputrescent and obtundent. Mixed with Oxide of Zinc forms a good pulp-cap.	*	A product of the distillation of Wood Tar.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
CRESOL	Cresol	A colourless or straw coloured liquid, having a phenol like odour and burning caustic taste. Miscible with alcohol and glycerine in all proportions. Slightly soluble in water.	Antiseptic and disinfectant. Local analgesic or anodyne in root canal dressings. Useful for cauterizing and stimulating sinuses associated with alveolar abscesses (*vide* also Trikresol).		Acid Cresylicum obtained from Coal Tar. There are three isomeric Cresols, a mixture of the three forming Trikresol.
DI-IODOFORM	Di-iodoformum	Fine yellowish white crystals without odour. Insoluble in water. Soluble in chloroform.	A good substitute for Iodoform, but more expensive.		Periodide of Ethylene.
DOBELL'S SOLUTION *vide* Solution)					

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
EASTON'S SYRUP		*vide* Syrup			
EPSOM SALTS		*vide* Salts			
ERGOT		*vide* Extract			
EUCAINE HYDROCHLORIDE, B.	Beta-Eucainæ Hydrochloridum	Odourless, white crystalline powder, having a bitter taste. Soluble 1-40 of water (*vide* Poison Table.)	Local anæsthetic in 2-3% solutions alone or in conjunction with Adrenalin Chloride Solution. Slower but safer than Cocaine. Simple solutions may be boiled without being decomposed.	10-20 minims for hypodermic injection.	The Beta Salts of Eucaine are the ones chiefly used in medicine, they are prepared by the action of an acid corresponding to the salt required on pure Eucaine. Eucaine (Beta) is Benzoyl - vinyl - diaceton-alkamine.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
EUCAINE LACTATE	Eucainæ Lactas	Soluble 1-4 of water	*vide* Eucaine Hydrochloride.		Eucaine salts resemble Cocaine both in their chemical and physiological action.
EUCALYPTOL	Eucalyptol	A colourless liquid with a camphoraceous odour and pungent cooling taste. Almost insoluble in water. Freely soluble in alcohol.	Ozoniser, Rubefacient, and Antiseptic. Less irritating than Oil of Eucalyptus. Solvent of Gutta Percha for root canal treatment.		The active principle of Eucalyptus Oil.
EUCALYPTUS OIL	Oleum Eucalypti	A faintly yellowish volatile oil, having an aromatic, camphoraceous odour and pungent, cooling taste. Insoluble in water. Soluble in alcohol.	*vide* uses of Eucalyptol which is recommended in preference.		The essential oil distilled from the fresh leaves of the Eucalyptus Plant.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
EUCHLORINE	Euchlorinum	A gas of characteristic pungent odour, soluble in water.	Powerful antiseptic, disinfectant and deodoriser. A solution of the gas is strongly recommended as a spray or gargle in Diphtheria.		Euchlorine is not prescribed as such. It is obtained by the addition of Hydrochloric Acid to Chlorate of Potash and allowed to stand a few minutes in a well corked bottle; water is then added quickly and the bottle well shaken to dissolve the fumes. Pot. Chlor. grs. 25. Ac. Hyd. Fort. mins. 10. Water to 8 ozs.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
EUGENOL	Eugenol	Thin, pale, yellow liquid, possessing a strongly aromatic clove odour and a pungent spicy taste. Insoluble in water. Soluble in alcohol.	Antiseptic and obtundent. Mixed with Zinc Oxide, makes an excellent pulp-cap. Preferable to Oil of Cloves.		The principle constituent of Oil of Cloves.
EXTRACT OF BELLADONNA (Green)	Extractum Belladonnæ Viride	A dark greenish brown mass of characteristic odour. Miscible with glycerine and oils. (*vide* Poison Table).	Anodyne and resolvent. As a paint with Glycerine, 50%, in inflammation of lymphatic glands and synovivitis.	*	Prepared by evaporating the expressed juice of the leaves and young branches of the Belladonna plant. Contains approximately ½% of total alkaloids, of which Atropine *q.v.* is the chief.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
EXTRACT OF CASCARA SAGRADA	Extractum Cascaræ Sagradæ	A dark brown mass, or dessicated powder, having a characteristic odour.	Tonic laxative, acting chiefly on the large intestine.	2-8 grs.	Prepared by percolation and evaporation from the bark of the Cascara Sagrada tree.
EXTRACT OF ERGOT, LIQUID	Extractum Ergotæ Liquidum	A thick, dark brown liquid, having a heavy disagreeable odour and rancid unpleasant taste (*vide* Poison Table.)	Hæmostatic. In hæmophilia may be administered a few hours previous to operating. N.B.—Should not be given in pregnancy.	½ to 1 fluid drachm	Prepared by digesting Ergot in water and subsequent addition of Alcohol.
EXTRACT OF THYROID GLAND	Extractum Thyroideæ Glandulæ (Thyroideum siccum).	A yellowish powder partially soluble in water.	Given in nasal obstruction from adenoids and enlarged tonsils due indirectly to a deficiency of thyroid secretion.	2 to 5 grs. in tablets or cachets	The healthy thyroid glands of the sheep freed from fat, cleaned, dried and powdered.
FLUORAM (*vide* Ammonium Bifluoride)					

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
FORMALIN OR FORMOL	Formalinum	A colourless liquid with a pungent irritating odour. Miscible with water, glycerine and alcohol in all proportions.	Disinfectant, antiputrefactive, bactericide. A constituent of putrescent pulp remedies. Less irritating when mixed with Cresol or Phenol. For sterilising instruments 10% should be added to an alkaline solution (Borax 5 grs. to 1 oz.) Is prepared in tablet form with Oil of Peppermint for dissolving in the mouth in stomatitis. As a mouth-wash, 1 in 1,000. (*vide* Hist Sect.)	*	Consists of a 40% solution of Formaldehyde.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
GALLIC ACID (*vide* Acid)					
GAUZE		Plain gauze is a white transparent fabric of cotton.	Used as a dressing for wounds.		
GAUZES, MEDICATED		Transparent cotton fabric, coloured according to the medicament with which plain gauze has been impregnated.	Used as dressings for wounds, for packing sinuses, cystic and abscess cavities, and antra, also to supply efficient drainage when required.		Bismuth—white —5-10 % Boric—pink—10% Carbolic — white — 5-10 % Iodoform — yellow 10-20 %
GLAUBER SALTS (*vide* Soda Sulphate)					

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
GLUCOSE	Glucosum	Clear, odourless, almost colourless thick liquid, resembling liquid honey.	The free administration before and after anæsthesia prevents vomiting and acidosis is avoided.		$C_6H_{12}O_6$. Found uncombined in plants and animals or may be obtained by the hydrolising action of acids on cane sugar. It is also prepared synthetically.
GLYCERINE	Glycerinum	A heavy, syrupy, clear colourless liquid, without odour and having a sweet taste. Freely soluble in water and alcohol.	Emollient, preservative. A vehicle for various medicaments to be used as paints for example: Belladonna, Borax, Iron and Tannin. An excipient in Tooth Pastes. As a solvent in solutions of Borax, and Boric Acid, for use as mouth washes.	1–2 drachms	The sweet principle obtained by the reaction of fats and fixed oils with aqueous fluids. Is obtained as a by-product in the manufacture of soaps.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
GLYCERINE OF BELLADONNA (*vide* Extract)					
GLYCERINE OF BORAX	Glycerinum Boracis	A clear, syrupy liquid, colourless and odourless. Sweetish alkaline taste.	Emollient, mild antiseptic. In thrush is applied by means of a swab. As a simple mouth wash in stomatitis, 1 oz. to 8 ozs. water.		A 1 to 6 solution of Borax in Glycerine and water.
GLYCERINE OF TANNIN	Glycerinum Acidi Tannici	A brown, .syrupy clear liquid without odour and having a strong astringent taste.	Astringent in stomatitis, laryngitis, pharyngitis, and spongy gums. As a mouth-wash ½ oz. in 8 ozs. water. As a paint, pure applied with a swab. As a spray 1 in 8 parts of water.		A 1 to 4 solution of Tannic Acid in Glycerine.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
GUAIACOL	Guaiacol	A colourless liquid with a characteristic aromatic odour.	Antiseptic, antipyretic. Indicated in painful rheumatic joint affections.	1-5 mins. three times daily in capsules.	Obtained by the fractional distillation of Wood Creosote.
GUAIACOL CARBONATE (DUOTAL)	Guaiacol Carbonas	A white crystalline powder, inodourous and tasteless. Insoluble in water.	Intestinal antiseptic. Indicated in rheumatoid arthritis.	3-10 grs. increased to 20 grs. thrice daily in cachets.	Contains theoretically 90% Guaiacol.
GUM ARABIC	Acaciae Gummi	Angular fragments with glistening surfaces or roundish, ovoid tears, colourless or yellowish, clear or opaque. Slowly soluble in water.	Demulcent. Emulsifying agent in various preparations. Largely employed in medicated pastilles. (*vide* Hist. Sec.)	*	A gummy exudation from the stem and branches of the Acacia plant.
GUM TRAGACANTH	Tragacantha	White flaky pieces and in white powder; sparingly	Largely used in pharmacy as Mucilage of Tragacanth (*contd.*)		A gummy exudation obtained by making incisions

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
GUM TRAGACANTH *(cont.)*		soluble in water, but swells up into a gelatinous mass. Odourless and tasteless.	(6 grs. 1 oz. water) for suspending heavy insoluble powders in mixtures. Used for its adhesive property to retain temporary plates in position.		into the stem of the Tragacanth tree.
GUTTA PERCHA	Gutta Percha	Sticks and cakes of varying size and colour, usually white or pink. Insoluble in water and alcohol, soluble in chloroform, turpentine and benzol.	Temporary filling, points are prepared for root canals. Chloro-Percha for root filling is a solution of Gutta Percha in Chloroform. For fixing bridge-work Gutta Percha, preferably the pink, should be warmed together with the bridge on a gold annealer.		The milky concrete juice of several trees of the Nat. Ord. Sapotaceæ.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
HONEY AND BORAX	Mel Boracis	A honey-like thick liquid.	For stomatitis or thrush in children a little may be used on a swab or be allowed to dissolve in the mouth.		1 part to 8½ parts of a mixture of Glycerine and Honey.
INJECTION OF APOMORPHINE (HYPODERMIC)	Injectio Apomorphinæ	A colourless, odourless liquid, with a slightly bitter taste. Does not keep well.	The most powerful and certain emetic.	2-8 minims hypodermically.	2 grs. of Apomorphine Hydrochloride in 100 minims of Camphor Water.
INJECTION OF COCAINE	Injectio Cocainæ. Hydrochloridi *vel* Lactatis. Dentalis.	Simple solutions are colourless and without odour. Compound solutions have the characteristic odour of the added drug. (*vide* Poison Table).	Local anæsthetic. The usual strength is from ¾ to 1 %. (*vide* also Cocaine).	About 10 to 30 minims hypodermically.	Solutions of varying strength in normal saline, alone or in conjunction with Adrenalin and Antiseptics. The British Pharmacopœia Injection is approximately 10 %.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
INJECTION OF EUCAINE	Injectio Eucainæ(B) Hydrochloridi *vel* Lactatis. Dentalis.	As injection of Cocaine. May be boiled without decomposing.	Local anæsthetic in solution of about 2 %. Slower in action than Cocaine, but safer—does not produce exhemia by the contraction of the blood vessels.	¼ to ½ gr. hypodermically.	Solutions of Eucaine (Beta), Hydrochloride or Lactate in normal saline or in conjunction with Adrenalin and Antiseptics.
INJECTION OF MORPHINE (Hypodermic)	Injectio Morphinæ Hypodermica	A clear colourless, odourless solution. (*vide* Poison Table).	Hypnotic, Narcotic, Analgesic.	1-5 minims.	Contains 1 grain of Tartrate of Morphia in 22 minims of distilled water.
INJECTION OF STRYCHNINE		(*vide* Strychnine)			
IODIDE OF POTASSIUM		(*vide* Potassium Iodide)			

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
IODINE	Iodum	Occurs in heavy, bluish black, friable crystals, having a metallic lustre, peculiar odour, and a sharp acrid taste. Volatile and on heating gives off a violet vapour. Sparingly soluble in water (1 in 5000), 1 in 10 of 90 % alcohol, and freely in a solution of Potassium Iodide. Destructive to most metal instruments, therefore it should be used with wooden points or aluminium tweezers. (*vide* Poison Table).	Strong antiseptic. Powerful and penetrating irritant. (*vide* solution and Tincture of). The Iodides of Potassium and Sodium are the more common salts. (*vide* Potassium Iodide and Liniment of). Colourless and odourless preparations, for internal administration, are prepared with Albumen, Proteid and Lecithin. These are more readily absorbed and less liable to produce Iodism.	$\frac{1}{10}$ grain	A non-metallic element obtained chiefly from the ashes of seaweed, from the mother liquors of Chilian nitre and from the saline constituents of certain mineral springs in Java and other parts of the Dutch East Indies.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
IODIPIN	Iodipinum	An oily pale yellow fluid, odourless and with slight peculiar taste.	The action of organically combined iodides differs from that of the alkaline iodides. They pass through the stomach practically unchanged, absorption taking place in the intestine; this fact obviates digestive disturbances, and though the Iodine action is said to be continuous and regular in character and maintained for a considerable period there is almost complete absence of the many undesirable sequelæ so often *(contd.)*	2 to 3 tablets three times a day. Children, a third above dose. By hypodermic injection 3 to 6 drs. of a 25% preparation daily or every second day.	A chemical combination of Iodine and Sesame Oil. It is obtainable in two strengths, 10 and 25% by weight of Iodine.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
IODIPIN (*contd.*)			coupled with the alkaline iodides. Their use is recommended where the administration of Iodine is desired for a long period, or where the patient is particularly susceptible to Iodine. May be given in tablets or by hypodermic injection, each tablet representing 1 grain of Potassium Iodide.		
IODOFORM	Iodoformum	Small lemon-yellow, hexagonal crystals and in fine yellow powder. Peculiar, very penetrating and persistent odour.	Antiseptic and slight sedative. Used for the treatment of septic root canals. As an emulsion (1 part in 10 of Glycerine) for injecting		A product of the action of Iodine on a mixture of Alcohol and a solution of Carbonate of Potassium.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
IODOFORM *(contd.)*		Sparingly soluble in water and alcohol. Miscible with fixed and Volatile Oils, and with Glycerine.	into septic cavities and sinuses. Its disagreeable odour, however, does not allow of its free use.		
IODOL	Iodol	A micro-crystalline brownish-white powder containing 90% Iodine. Insoluble in water, soluble 1 in 34 Glycerine. Has no unpleasant smell.	Antiseptic, but has no anæsthetic tonic action like Iodoform. Its application to wounds is painless. May be used emulsified with Glycerine (1 in 10) in septic cavities and sinuses in place of Iodoform.		Iodol is chemically Tetraiodpyrrol ($C_4 I_4 NH$).
IRON, PERCHLORIDE OF		(*vide* Solution and Tincture)			

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
KAOLIN	Kaolinum Preparatum	A pearly white powder, unctuous to the touch and freed largely of its grittiness. Odourless and insoluble.	Absorbent and allays irritation. An ingredient in some skin dusting powders, and of porcelain body. Is official in the U.S. Pharmacopœia for making Cataplasms. Used hot as a poultice when mixed into a paste with Oil or Glycerine, for application in painful inflammatory conditions about the neck and jaws.		China clay, a native Aluminium Silicate derived from the decomposition of the Felspar of granite rocks, powdered and freed of gritty particles by elutriation.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
LAVENDER OIL (*vide* Oil).					
LAUDANUM	Tinctura Opii	A dark brown spirituous liquid, having the peculiar narcotic odour of Opium and a bitter taste. (*vide* Poison Table).	Sedative, narcotic, analgesic. Should only be used in dental pains where other simple remedies have failed. Has little effect as an application. A popular mouth-wash (sedative and astringent) to produce local sedation of sensory nerves and contraction of vessels in hyperæmia is:— Tinct. Opii ʒi; Liq. Plumbi Subacet. dil. ʒx.	10-30 minims.	Prepared by macerating Opium in Alcohol and water. Contains ·75% of Morphine.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
LEAD LOTION	Liquor Plumbi Subacetatis dilutus	A clear colourless liquid without odour. A deposit of Carbonate of Lead forms if left exposed to the air. (*vide* Poison Table).	Astringent and sedative. As a lotion may be applied on lint in most inflammatory conditions.		A ·3% solution of Subacetate of Lead.
LEECH	Hirudo		Used in blood-letting. When used for local depletion in the mouth should be applied by means of a leech glass.		Modified annelids or ringed worms adapted to a special method of life.
LIME WATER (*vide* Solution)					
LINSEED MEAL	Farina Lini	A brown mealy powder with a characteristic oily smell.	Exceedingly useful for poulticing deep-seated inflammations.		The crushed seeds of the Flax plant; in which the oil has been retained.
LINSEED OIL (*vide* Oil)					

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
LINIMENT OF ACONITE	Linimentum Aconiti	A clear brown liquid with a spirituous odour of Camphor. Miscible with oils and other liniments. (*vide* Poison Table).	Anodyne. As an external liniment in facial neuralgia. May be used alone, or in combination with Menthol, Liniment of Camphor, Liniment of Soap, &c. Causes a sensation of tingling and subsequent numbness of the part.		Prepared by maceration and percolation of Aconite root with Alcohol to which Camphor has been added.
BELLADONNA	Linimentum Belladonnæ	A clear brown liquid with a spirituous odour of Camphor. Miscible with oils and other Liniments (*vide* Poison Table).	Is a topical sedative for neuralgia; as an external liniment may be used alone or in combination with Menthol, Liniments of Camphor, Soap, &c.		Prepared by maceration and percolation of Belladonna root with Alcohol in which Camphor has been dissolved.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
LINIMENT OF CAMPHOR (CAMPHORATED OIL)	Linimentum Camphoræ	A pale straw coloured oily preparation with the characteristic odour of Camphor. Miscible with most other liniments.	Rubefacient and stimulant; is useful as a milder form of liniment in neuralgia. May be used with drugs as Menthol, or mixed to the extent of 50-75% with stronger liniments.		A 1-4 solution of Camphor in Olive Oil.
CHLOROFORM	Linimentum Chloroformi	A straw coloured oily liquid with the characteristic odours of Camphor and Chloroform.	A counter irritant in neuralgia. Mixed (25 to 50%) with other liniments the Chloroform aids their absorption.		A mixture of equal parts of Chloroform and Liniment of Camphor.
MENTHOL	Linimentum Mentholi	A pale yellow oily liquid with the characteristic odours of Menthol and Chloroform.	Rubefacient, used as an external application in neuralgia.		Contains 20% Menthol with 25% Chloroform in Olive Oil.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
LINIMENT OF **POTASSIUM IODIDE** WITH **SOAP**	Linimentum Potassii Iodidi cum Sapone	A white creamy saponaceous paste, having the characteristic odour of Lemon Oil with which it is flavoured.	Resolvent. May be used as a liniment in inflammatory conditions of lymphatic glands, and joint affections.		1 in 10 of Potassium Iodide.
SOAP	Linimentum Saponis	A pale straw coloured liquid with camphoraceous odour.	A simple external application for use in neuralgia and rheumatic affections of the temporo-mandibular joint. May be used alone as a stimulant or mixed with varying quantities of the more powerful liniments as a diluent.		A spirituous solution of Hard Soap, Camphor and Oil of Rosemary.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
LITHIUM CITRATE	Lithii Citras	A white crystalline powder, with a cool, slightly alkaline taste. Soluble in water.	Diuretic; given in gouty affections with a view to increasing the alkalinity of the blood and acting as a solvent of the Sodium Bi-urate deposits. It has for this reason been extensively used in the treatment of Pyorrhœa Alveolaris, and Osteo-Arthritis, its efficiency however is doubtful.	5-30 grs.	Prepared by the action of Citric Acid on Carbonate of Lithia.
LITHIUM SALICYLATE	Lithii Salicylas	A deliquescent whitish powder, faintly acid and with a sweetish taste. Soluble 4 in 3 of water.	Preferable to Sodium Salicylate in cases of chronic articular rheumatism.	10-30 grs.	Prepared by the action of Salicylic Acid on Carbonate of Lithia.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
LITMUS PAPER		Usually in red and blue strips and made up into books.	For testing the acidity or alkalinity of the saliva; the red turning blue when alkalinity predominates, the blue turning red when an acid condition is present.		Unsized white paper steeped in a solution of Litmus produces the blue paper. The red is prepared by the addition of a minute quantity of acid.
LYSOL	Lysol	A brown, oily liquid, miscible with water, and having the characteristic odour of Cresols.	Antiseptic, disinfectant and bactericide. Useful for sterilising instruments, a 2% solution being used; is recommended as a mouth wash (1%) after the extraction of septic roots. Applied pure, on a pellet of wool, to painful and septic sockets it gives great relief.		A solution in neutral soap of Tar Oils, which distil 187° and 200° C, and which are present in the finished preparation to the extent of about 47%.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE	DOSE.	DESCRIPTION.
MAGNESIA CALCINED (*a*) LIGHT (*b*) HEAVY	Magnesia Levis Magnesia Ponderosa	A white inodourous powder possessing a faintly alkaline taste. Should be kept in well-closed bottles.	Antacid, for which property it is used in tooth powders. The light is used as a diluent to heavy powders.	*	Oxide of Magnesium. Prepared from Carbonate of Magnesia by calcination.
MAGNESIA CARBONATE (*a*) LIGHT (*b*) HEAVY	Magnesiæ Carbonas Levis Magnesiæ Carbonas Ponderosa	A white inodourous powder with a faintly alkaline taste.	Antacid, used in tooth powders; the carbonates being the most suitable magnesia salts for this purpose.	*	Prepared from solutions of Sulphate of Magnesia and Carbonate of Soda, the strength of the solution determining whether the resulting Carbonate be heavy or light.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
MAGNESIA, MILK OF	Liquor Magnesiæ Hydroxidi, Emulsio Magnesiæ B.P.C. (*B.P.C. = British Pharmaceutical Codex*)	A white creamy fluid with little taste. Its alkalinity is due to the Hydroxide of of Magnesia which it contains.	Antacid. May be used pure or diluted.	2 fluid drachms	Prepared from a solution of Magnesium Sulphate by the action of Potassium Hydroxide, subsequent washings being made until they are free from any saline taste.
MAGNESIA PEROXIDE	Magnesii Peroxidum (Magnesii Hydroxidum)	White, light, non-hygroscopic powder, insoluble in water and alcohol.	Used in preparing tooth powders where free oxygen is desired. Such powders are especially serviceable where much tartar forms and discolouration rapidly takes place.		MgO_2. Formed by the interaction of Light Oxide of Magnesia 1 part, and Water 15 parts. Contains about 10% available oxygen, which is evolved when coming into contact with acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
MAGNESIUM SULPHATE		(*vide* Epsom Salts).			
MASTICH	Mastiche	Small irregular pale yellow tears, brittle and usually transparent. Insoluble in water. Soluble 2 in 1 of Ether or Chloroform.	Dissolved in Ether or Chloroform, and medicated may be used as a temporary stopping with a pellet of wool.		A concrete resinous exudation obtained by making incisions in the bark of the stem and large branches of the Mastich tree.
MENTHOL	Menthol	Colourless, acicular or prismatic crystals having a strong peppermint odour. Sparingly soluble in water. Freely soluble in alcohol, ether or chloroform.	Obtundent, antiseptic, local analgesic. 3 parts rubbed down with 2 parts of Camphor form a liquid suitable for application to the gums.	★	A stearoptene obtained by cooling the oil distilled from varieties of Peppermint herb.

NAME.	LATIN NOMENCLATURE	CHARACTERS	USE.	DOSE.	DESCRIPTION.
MERCURIC POTASSIC IODIDE	Hydrargyri et Potassii Iodidum	Reddish yellow acicular crystals, freely soluble in water. Odourless.	Antiseptic and bactericide. Is a useful antiseptic for the hands when operating and preferable for this purpose to the Perchloride of Mercury. Tablets of convenient size are obtainable and are recommended in preference to the salt.		Obtained by the mixing together of solutions of Mercuric Chloride and Potassium Iodide in constant proportions.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
MERCURY PERCHLORIDE MERCURIC CHLORIDE, CORROSIVE SUBLIMATE	Hydrargyri Perchloridum	Heavy, colourless, rhombic crystals, or crystalline masses or a heavy white crystalline powder. Odourless. Soluble 1 in 16 water, 1 in 3 alcohol. Has a destructive action on metal instruments. (*vide* Poison Table). An exceedingly powerful poison and should only be used with the greatest caution.	A powerful antiseptic, bactericide and disinfectant. In syphilitic affections it may, with proper caution, be prescribed as a mouthwash, 1 gr. in 4 oz. of water (1 in 2,000). Is obtainable in tablets of standard strength which are preferable to the salt itself for use in the surgery. Is largely prescribed with Iodide of Potassium for internal use in syphilis. An alcoholic solution of 1 in 500 may be used for sterilising infected dentine.	$\frac{1}{32}$-$\frac{1}{16}$ gr.	$HgCl_2$. Prepared by sublimation from Persulphate of Mercury and Chloride of Sodium.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
MERCURY SUBCHLORIDE MERCUROUS CHLORIDE, CALOMEL	Hydrargyri subchloridum	A heavy, whitish, odourless, tasteless, impalpable powder. Should be kept in a dark bottle. Insoluble in all ordinary liquids.	Alterative, antiseptic, stimulant. May be advantageously applied to indolent ulcers. As a lotion for syphilitic sores 3 grs. to 1 oz. of Lime Water forms "Black Wash." Used largely in medicine as a purgative, followed by Epsom Salts or Black Draught.	1 to 5 gr.	HgCl. Prepared by sublimation from Persulphate of Mercury and Sodium Chloride
METHYLATED SPIRIT (*vide* Spirit)					

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
METHYLENE BLUE		*vide* Histological Section.			
METHYL SALICYLATE		*vide* Salicylate of Methyl.			
MILK OF MAGNESIA		*vide* Magnesia, Milk of.			
MONOCHLOROPHENOL (PARA)	Para-Mono-chlorophenol	Small, white crystals. Insoluble in water. Soluble in Alcohol, Ether and Glycerine.	Antiseptic and bactericide. May be applied with care to pyorrhœa pockets.		Prepared by the action of Chlorine on Phenol

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
MORPHINE ACETATE,		*vide* Solution.			
HYDROCHLORIDE,		,,			
TARTRATE,		,,			
MUCILAGE OF ACACIA		*vide* Histological Section.			
MYRRH		*vide* Tincture.			
NITROUS OXIDE GAS	Nitrogenii Monoxidum	A colourless, odourless gas with a somewhat sweetish taste.	General anæsthetic and analgesic, alone or with Oxygen.		N_2O. Prepared by heating solid Ammonium Nitrate.
NEUROCAINE	Neurocaina	White billets of Cocaine $\frac{1}{8}$ in. long and $\frac{1}{20}$ in. diameter, very soluble in water	In the removal of pulp by pressure anæsthesia it is specially indicated.		Hydrochloride of Cocaine.

NAME	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
NOVOCAINE	Novocainæ Hydrochloridum	Colourless needle-shaped crystals, soluble in water. Aqueous solutions do not decompose on boiling.	Local anæsthetic, employed with Adrenalin gives satisfactory results. Is best employed in tablets or ampoule form. Far less toxic than Cocaine.	*	Para-aminobenzoyldiethylamino-ethanol Hydrochloride.
OILS ANISEED	Oleum Anisi	At 60° F. is a colourless liquid with a pleasant aromatic odour and very sweet taste. Freezes below 59° F. Insoluble in water. Soluble in alcohol.	As a flavouring agent is an ingredient in many dentifrices chiefly in liquid preparations in combination with Peppermint. A cloudy solution is formed when such dentifrices are diluted with water.	*	Distilled from the Anise Fruit.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OILS (*contd.*) CAJUPUT	Oleum Cajuputi	A transparent bluish green, thin, oily liquid, with an agreeable odour and pungent camphoraceous taste.	Antiseptic and local analgesic. Useful for sterilising septic root canals and obtunding sensitive dentine. May be added in small quantities to Camphorated Oil for use as a liniment in neuralgic and rheumatic affections.		Distilled from the leaves of the Cajuput plant.
CAMOMILE	Oleum Anthemidis	A light blue oily liquid of aromatic odour and balmy taste.	Antiseptic, but too irritating for general use. Diluted with Olive or Camphorated Oil (1 in 10) makes a good liniment.		Distilled from dried Camomile flowers.
CAMPHORATED (*vide* Liniment of Camphor)					

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OILS (*contd.*) CASSIA	Oleum Cassiæ	A brownish liquid, becoming dark with age. Has a sweetish, spicy, burning taste. Soluble in Alcohol.	Aromatic and Antiseptic. Has similar properties to Oil of Cinnamon, for which it is often substituted. Obtundent to sensitive dentine. Used in dentifrices and toothache remedies. Inferior in flavour to Oil of Cinnamon.		Distilled from the Cassia bark.
CASTOR	Oleum Ricini	A colourless or pale yellow, almost odourless, thick viscid fluid; mild, but somewhat nauseous to taste. Soluble in Alcohol.	A mild and speedy Cathartic—the safest for children. Mistura Olei Ricini is an emulsion flavoured with Cinnamon and Orange flower to disguise the taste of the pure Oil.	½ to 1 oz. Mist. Ol. Ricini. 1 to 2 ozs.	The oil expressed from the seeds of the Castor Oil plant.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OILS (*contd.*) CINNAMON	Oleum Cinnamomi	A light yellow liquid with a delicate aromatic odour and a spicy sweet burning taste. Darkens by exposure to light and air. Soluble in Alcohol.	Antiseptic, aromatic, obtundent. Used in dentifrices and toothache remedies. (*vide* Hist. Sect.).		Distilled from Cinnamon bark.
CLOVE	Oleum Caryophylli	A thin pale yellow volatile oil, with the characteristic odour and pungent taste of Cloves. Soluble in alcohol.	Local analgesic, aromatic, antiseptic and obtundent. An ingredient in dentifrices and toothache remedies. *vide* Eugenol which is less irritating. (*vide* Hist. Sec).		Distilled from the unexpanded flower buds of the Clove plant. Contains 80% Eugenol.
EUCALYPTUS (*vide* Eucalyptus Oil).					

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OILS (*contd.*) GERANIUM	Oleum Geranii	A pale yellowish oily liquid with a powerful rosaceous odour. Soluble in alcohol and oils.	Flavouring for dentifrices (2 or 3 drops to the oz.). More frequently used than the much more expensive Oil of Rose (Otto) *q.v.*, but has not so delicate a flavour.		Distilled from Rose Geranium petals.
LAVENDER	Oleum Lavandulæ	A pale yellow or greenish yellow oily liquid, having a pleasant characteristic odour and an aromatic and somewhat bitter taste. Soluble in alcohol.	Flavouring agent used frequently in combination with Rose Oil.		Distilled from Lavender flowers.
LINSEED	Oleum Lini	A pale yellow oil with characteristic odour. Becomes oxidised on exposure to air. Miscible with chloroform and turpentine.	An ingredient in Carron Oil, one of the best applications to burns or scalds. It is prepared by shaking together (*contd.*)	✶	Expressed from the seeds of the common Flax.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OILS (*contd.*) LINSEED			equal parts of Lime-water and Linseed Oil. 1% of Carbolic Acid may be added.		
NUTMEG	Oleum Myristicæ	A colourless or pale yellow mobile liquid with a characteristic odour and spicy taste. Soluble in alcohol and miscible with fixed oils.	Flavouring agent. Is an ingredient in Sal Volatile.		The volatile oil distilled from Nutmegs.
OLIVE	Oleum Olivæ	A clear pale yellow or light greenish-yellow oily fluid with a faint characteristic odour and bland oily taste.	Emollient, demulcent, nutritive and laxative. Given in cases of corrosive poisoning. Useful as an application to scalds and burns. Used in the preparation of Liniment of Camphor (*q.v.*) and various ointments and plasters.	½-1 fluid oz.	The fixed oil expressed from ripe Olives.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OILS (*contd.*) PEPPERMINT	Oleum Menthæ Piperitæ	A clear, colourless or pale yellow or greenish yellow oily liquid having a peculiar refreshing odour and characteristic taste. Soluble in alcohol.	Antiseptic and flavouring agent. Is used for the official preparations—Peppermint Spirit and Water — Its chief use is for flavouring dentifrices (5 or 6 drops to the oz.) and it leaves a cool refreshing sensation in the mouth. Is recommended in conjunction with an equal quantity of Aniseed Oil.	*	The volatile oil distilled from the fresh flowering Peppermint herb.
PINE	Oleum Pini	A colourless or pale yellow limpid oily liquid having an agreeable characteristic odour.	Antiseptic and disinfectant.		Distilled from the fresh Pine leaves.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OILS (*contd.*) ROSE (OTTO OF ROSE)	Oleum Rosæ	A pale yellow oily liquid at a temperature of 30 °C. whilst at 18° - 21° C. it exists as shining acicular crystals or glistening crystalline laminæ and when further cooled the oil sets to a semi-solid crystalline mass. Soluble in alcohol and oils. Has a powerful rosaceous odour.	As a flavouring agent in dentifrices 1 drop to the oz. is recommended.		Distilled from the fresh flowers of the Damask Rose and occasionally from other species.
WINTER-GREEN	Oleum Gaultheriæ	A colourless or yellow liquid with a strong characteristic odour and pungent taste.	Antiseptic and flavouring agent for dentifrices, 1 or 2 drops to the oz. (*contd.*)		Distilled from the leaves of the Wintergreen plant.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OILS (*contd.*) WINTER-GREEN		Soluble in alcohol.	It may be used mixed with an equal part of Camphorated Oil as an application in facial neuralgia, though Methyl Salicytate (*q.v.*) which is artificial Oil of Wintergreen is preferable.		Is chemically Salicylate of Methyl.
OPIUM (*vide* Tincture)					
ORRIS ROOT, POWDER	Pulvis Iridis	A smooth non-crystalline pale yellowish white powder, with an agreeable violet odour and a slight acrid taste. Insoluble in the usual liquid media.	A flavouring agent used in tooth powders and pastes.		The powdered dried rhizome of Iris Florentina

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ORTHOFORM	Orthoformum	A fine yellowish white odourless, tasteless crystalline powder. Insoluble in water. Soluble in 6 parts of Alcohol.	Antiseptic and Anæsthetic. Has been used as a local anæsthetic, but its greatest value is in the treatment of painful sockets after extraction. It should be applied in the form of a paste with liquid paraffin and lanoline.	*	The Methyl-ester of Meta-amido-para-oxybenzoic Acid
OSMIC ACID (*vide* Acids)					
OTTO OF ROSES (*vide* Oils)					
OXYGEN	Oxygen	A tasteless, colourless and odourless gas, having the atomic weight 16;	Used in combination with Nitrous Oxide Gas for anæsthesia and analgesia,	*	Obtained by heating together Manganese Dioxide and Chlorate of Potash,

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
OXYGEN *(contd.)*		supplied compressed in cylinders.	rendering it the safest of all methods. The medicinal properties of Peroxide of Hydrogen and Sodium Peroxide *q.v.*, are dependent upon the free Oxygen liberated.		also by Brins' Baryta process.
PARAFFIN HARD	Paraffinum Durum	A colourless, crystalline, wax-like solid. Insoluble in water, sparingly soluble in alcohol, more soluble in ether, readily soluble in oils and fats on heating. Melts at 110°-145° F.	Used in conjunction with various antiseptics for root-filling. For plugging tooth sockets after extractions. In general surgery by subcutaneous and submucous injection for the correction of various defects about the nose and jaws, also in keritherapy.		A mixture of several of the harder members of the Paraffin series of Hydrocarbons, usually obtained by distillation from shale.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
PARAFFIN, LIQUID	Paraffinum Liquidum	A colourless, odourless, tasteless transparent oily fluid.	A solvent for antiseptics as Menthol, Salicylate of Methyl, and various essential oils used for spraying the nose and throat.	*	Composed of some fluid members of the Paraffin series of Hydrocarbons.
SOFT (VASELINE)	Paraffinum Molle	A yellowish or white ointment-like mass.	Lubricant, and excipient for antiseptic ointments. Is useful for smearing strips and discs when polishing fillings, and for greasing carborundum wheels when grinding down teeth for crowning. After sterilisation it may be successfully used for injecting		Composed of some of the softer members of the Paraffin series of Hydrocarbons.

Name	Latin Nomenclature	Characters.	Use.	Dose.	Description.
PARAFFIN, Soft (*contd.*)			into suppurating and foul cavities by means of a warmed syringe in the same way as Beck's Paste; the advantage claimed is that it is free from any danger of poisoning.		
PARAFORM	Paraformaldehydum	A white fine crystalline or amorphous powder, with peculiar slightly pungent odour. Slowly soluble in water or alcohol.	Antiseptic, disinfectant, bactericide and obtundent. For sensitive dentine a little may be mixed with Oxyphosphate cement, and allowed to remain in the cavity a few days. Is contained in some mummifying pastes and root-filling preparations.		Is prepared by polymerising Formic Aldehyde by heat.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
PARA-MONO-CHLORO-PHENOL		*vide* Mono-chloro-phenol.			
PERHYDROL	Perhydrol	A colourless, odourless liquid having similar properties to Peroxide of Hydogen *q.v.*, but is ten times the strength of H_2O_2 10 vols.	Bleaches discoloured dentine, and should be applied on a pellet of wool and allowed to remain for some minutes. The application should be repeated two or three times if necessary.		A chemically pure Hydrogen Peroxide which is free from acids, although it reddens Litmus.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
PEROXIDE OF HYDROGEN	Liquor Hydrogenii Peroxidi	A colourless, odourless liquid eliminating varying quantities of available oxygen when decomposed. Acid solutions may be rendered stable by a minute addition of Antifebrin.	Antiseptic and astringent. Recommended for washing out septic root canals and swabbing ulcerated surfaces. Diluted with water it may be used as a mouth-wash or spray, after which it is advisable to rinse the mouth thoroughly with warm water or preferably with an alkaline wash. As a mouth-wash or spray, 1 teaspoonful to a wineglassful of water. *(contd.)*		Prepared by the interaction of Barium Peroxide, water and a dilute mineral acid. Is obtainable in three strengths, viz.:—10 vols., 12 vols. and 20 vols. The 10 vols. is the official Pharmacopœia solution.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
PEROXIDE OF HYDROGEN (*contd.*)			Its use is contra indicated in deep sinuses and closed cavities. Boricated Peroxide is claimed to be better tolerated by the mucous membrane.		
PHENACETIN	Phenacetinum	White, shining, laminar crystals or in powder. Tasteless and sparingly soluble in water.	Antipyretic, analgesic. Is less toxic than some of the other coal-tar derivatives as Antipyrin and Antifebrin.	5-10 gr. in powder, cachets or tablets.	Produced by the action of Glacial Acetic Acid on Paraphenetidin, which is obtained from Phenol.
PHENALGIN	Phenalginum	A white tasteless powder sparingly soluble in water.	Antipyretic and hypnotic. Has a depressant action on the heart.	5-20 grs. in powder, cachets or tablets.	An ammoniated derivative of Antifebrin.
PHENAZONE		*vide* Antipyrin.			

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
PHENOL		*vide* Carbolic Acid			
PHOSPHOROUS	Phosphorus	A pale yellowish, almost translucent waxy solid of characteristic and disagreeable odour. Rapidly oxidises on exposure to air. Should be kept under water. Insoluble in water, slightly soluble in alcohol, 1-200 ether, 1-25 chloroform. (*vide* Poison Table).	Tonic, recommended in neuralgia, accompanied by great debility. Is best prescribed in pill form, to be taken every four hours.	$\frac{1}{100}$ gr.	A non-metallic element obtained from bones.
PILOCARPINE (*vide* Poisons and Antidotes)	Pilocarpina	The official salt, the Nitrate, is in small white crystals. Soluble 1-8 of water.	Diaphoretic and Sialagogue.	$\frac{1}{20}$ to $\frac{1}{2}$ gr.	An alkaloid obtained from the leaves of the jaborandi plant.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
PIPERAZIN	Piperazinum	Colourless alkaline deliquescent crystals having a saline taste. Soluble in water.	Given chiefly for the Uric Acid diathesis and hence may be useful in Pyorrhœa Alveolaris. Is conveniently prepared in effervescent granules.	4-10 grs. in powder, cachets, tablets or mixture.	Diethylene-diamine. Is produced by the action of Ammonia on Ethylene Bromide or Chloride.
PITUITARY GLAND EXTRACT		A brownish odourless substance, insoluble in all ordinary media and usually seen in tablet form of standard strength.	Recommended in surgical shock and collapse.	2-4 grs. three or four times daily after food.	An extract of the infundibular substance of the gland.
PLASTER OF PARIS	Calcii Sulphas	A white heavy powder of different degrees of fineness.	In the laboratory for model making; in the surgery for taking impressions and for making bandages.		Purified native Sulphate of Calcium.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
POPPY HEADS	Capsulæ Papaveris	Dried brownish capsules containing a large number of loose small blackish seeds.	Sedative. The crushed capsule is used for making a decoction for hot fomentations in neuralgia, periodontal diseases and abscesses. The seeds should be rejected. The addition of an equal quantity of Camomile flowers is recommended :— Poppy Heads, 2 ; Camomiles, 1 oz. ; Water, 2 pints. Boil down to 1 pint.		The nearly ripe fruit of the poppy.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
POTASH, CAUSTIC	Potassa Caustica Potassii Hydroxidum	White deliquescent sticks or cakes. Odourless. Very soluble in water.	Escharotic acting by abstracting the water from the tissues. Used to destroy exuberant granulations, for removing gum tissue protruding into tooth cavities or overlying the cervical edges. Is best employed with Lime (Potassa cumCalce). May be used in a 10% solution for destroying remnants of pulp tissue. Care must be taken not to force it through the apical foramen, and also to neutralise with dilute acid and syringe well.		KHO Obtained by boiling down solutions of Potash, *q.v.*

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
POTASSA CUM CALCE	Potassa c̄ Calce	Resembles Caustic Potash (*q.v.*) in appearance, but does not diffuse so quickly.	(*vide* Potash Caustic.) Its action should be carefully circumscribed by means of Vaseline, cotton rolls and napkins.		Hydrate of Potash, 2 parts; Oxide of Lime, 1 part.
POTASSIUM BICARBONATE	Potassii Bicarbonas	A white crystalline powder or colourless prismatic crystals without odour and with an alkaline saline taste. Soluble 1 in 4 of water.	Antacid and Uric Acid solvent, hence its supposed value in cases of Pyorrhœa Alveolaris.	5 to 20 grs.	Obtained by saturating a strong aqueous solution of Carbonate of Potash with CO_2.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
POTASSIUM BICHROMATE	Potassii Bichromas	Large orange red, odourless, translucent prismatic crystals, having a bitter taste. Soluble in water.	Escharotic and stimulant. May be used in weak solutions (5%) for applying to indolent ulcers, mucous patches, and sloughing wounds. (*vide* Hist. Sect.)		Prepared by roasting Chrome Iron Stone with Carbonate of Potash and subsequent treatment with Nitric Acid and heat.
POTASSIUM BROMIDE	Potassii Bromidum	Colourless or white odourless cubical crystals with a strong characteristic saline taste. Freely soluble in water.	Sedative and hypnotic. Very successful in hysteria, migraine and neuralgia. May be given with advantage in nervousness, caused by fear of dental operations, on the preceding day. Bromism is liable to occur if administration .be continued too long.	5-30 grs. 10 grs. dissolved in water and Syrup of Orange ½ dr. added, may be taken two or three times in the day.	Prepared by crystallisation from the fused product of a mixture of Bromine and Solution of Potash.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
POTASSIUM CHLORATE	Potassii Chloras	Colourless, glistening, translucent, monoclinic prisms or plates, or as a white odourless powder, with a cooling saline taste. Soluble 1 in 16 of cold water.	Alterative, local stimulant, and antiseptic. Recommended as a mouth wash (10 grs.-1 oz.) for spongy, inflamed, and irritable gums; useful in Ulcerative and Mercurial Stomatitis, Pyorrhœa Alveolaris and Syphilitic affections. The powder may be applied to Aphthæ in the mouth. It is advantageously added to tooth powders and pastes.	3-5 grs.	Prepared by passing Chlorine into a mixture of Carbonate of Potash and Slaked Lime and subsequent purification by crystallisation.
POTASSIUM HYDROXIDE		*vide* Potash Caustic.			

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
POTASSIUM IODIDE	Potassii Iodidum	Colourless, translucent or white opaque cubical crystals with a saline somewhat bitter metallic taste. Alkaline in reaction. Freely soluble in water.	Alterative. Given in tertiary Syphilis, also in Actinomycosis in large doses with complete success. Is useful in morbid conditions of the mucous membrane, acute alveolar abscesses and chronic metallic poisoning. The danger of Iodism should always be borne in mind, this condition is dependent on the susceptibility of the patient, as is the case with many drugs. It is for this reason that organic compounds	5-20 grs. The amount given varies considerably. Doses of 5 grains thrice daily is usual, but in Syphilis of the Nervous System and Actinomycosis 20 grs. is frequently given.	Prepared by crystallisation from the fused products of Iodine and Solution of Potash.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
POTASSIUM IODIDE (*contd.*)			of Iodine are to be preferred. Externally as a liniment (*vide* Liniment of Potass. Iod. with Soap) is indicated in inflammatory conditions of the lymphatic glands.		
POTASSIUM PERMANGANATE	Potassii Permanganas	Slender, dark purple prisms odourless and of a sweetish astringent taste. Freely soluble in water. Should be handled with care when brought into contact with readily oxidisable substances as Alcohol, Gallic and Tannic Acids, Glycerine and	Disinfectant. Deodorant. May be employed as a mouth-wash (2 grs. to 1 oz.) in such septic conditions as fœtor of the breath, foul ulcers, and syphilitic sores. Has a tendency to discolour the teeth.	*	Prepared by evaporating a mixed solution of Chlorate of Potash and Caustic Potash in the presence of Black Oxide of Manganese.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
POTASSIUM PERMANGANATE (*contd.*)		Essential Oils, as it readily parts with its Oxygen and frequently causes an explosion. Solutions mixed with H_2O_2 evolve nascent Oxygen. Its disinfecting and deodorising properties are due to its yielding Oxygen in the presence of organic matter.			
POTASSIUM PHENATE (*vide* Solution of)					
PROTARGOL	Protargol	A light brown, odourless powder, with a disagreeable metallic taste. Soluble in water.	Antiseptic, astringent. May be used in some conditions in place of Argyrol (*q.v.*) though the latter is usually preferred.		Contains 8·3% of silver combined with protein.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
PUMICE STONE POWDER	Pulvis Lapis Pumicis	A heavy powder of varying degrees of fineness, without odour and of a grey colour.	Chiefly used in the laboratory for polishing. Is at times permissible for use in the mouth after scaling.		Powdered porous volcanic rock.
PUTTY POWDER		*vide* Oxide of Tin			
PYRAMIDON	Pyramidon	Yellowish, white, tasteless, crystalline powder, readily soluble in water and alcohol.	Analgesic and antipyretic. Recommended in neuralgia of peripheral origin.	3 to 10 grs. in powder, cachet or mixture.	Dimethyl - Amido-Antipyrin.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
QUININE AND IRON CITRATE	Quininæ et Ferri Citras	Scales of a greenish golden yellow, somewhat deliquescent and entirely soluble in water. Solution is slightly acid, and has a bitter taste resembling Quinine.	Tonic and analgesic, having the advantages of being freely soluble and possessing the additional tonic properties of Iron. In conjunction with Tincture of Gelsemium (3 to 5 drops) it is said to be a specific in neuralgia.	5 to 10 grs. in water may be prescribed with Syrup of Orange, 1 dr. to the oz.	Prepared from Persulphate of Iron and Sulphate of Quinine by the action of Ammonia and Citric Acid.
QUININE HYDROCHLORIDE	Quininæ Hydrochloridum	White, odourless, silky acicular crystals, with a very bitter taste. Soluble 1 in 40 of water, readily soluble in alcohol.	Tonic, antipyretic, analgesic and a specific in certain fevers. The Quinine Salts of which the two most important are given resemble one another in their therapeutic properties. *(contd.)*	1 to 10 grs. in powder, tablets or cachets. The Sulphate may be prescribed in a mixture	The Hydrochloride of an alkaloid prepared from various kinds of Cinchona bark.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
QUININE HYDROCHLORIDE (*contd.*)			The action varies with the idiosyncracy of the patient, whilst one can take large doses, another is quickly affected by minute doses, and suffers from headache, and ringing in the ears. Has been recommended for its tonic and antiseptic properties as a local application to pyorrhœa pockets.	with Acidulated Water (Ac.Sulph. dil.5 drops to the oz.) The Hydrochloride may be given in Wine or Tincture of Orange. The latter resembles the official Tincture of Quinine which contains 1 gr. in 1 dr.	

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
QUININE SULPHATE	Quininæ Sulphas	*vide* Quinine Hydrochloride.		1 to 10 grains	The Sulphate is prepared from the same source as the Hydrochloride by substituting Sulphuric Acid for Hydrochloric.
RHATANY (*vide* Tincture)					
ROUGE	Ferri Oxidum	A heavy dark red powder, insoluble in the usual media.	For polishing metal work it is chiefly used in the laboratory, but may be employed for metallic fillings in the mouth, preferably on strips, discs or tape.		$Fe_2 O_3$ Prepared by calcining Sulphate of Iron.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
RHUBARB ROOT	Radix Rhei	A brownish yellow tough, hard and gritty substance having a bitter astringent taste and peculiar odour.	Cathartic and Astringent, the cathartic action preceding the astringent. Useful in acute inflammatory diarrhœa in children during teething, and should be given in small doses.	3 to 10 grains.	The dried prepared rhizomes of the Rheum Palmatum.
SACCHARIN	Glusidum	A white crystalline powder with an exceedingly sweet characteristic taste. 500 times as sweet as cane sugar. Very sparingly soluble in cold water, 1 in 28 of boiling water.	Used as a substitute for sugar in dentifrices, about $\frac{1}{4}$ gr. to the oz. Being more soluble in alkaline solutions, tablets are prepared with Bicarbonate of Soda (soluble saccharine) for sweetening tea &c. in diabetes and allied complaints.	$\frac{1}{2}$ to 2 grs.	A sweet Imide derived from the Toluene of Coal Tar.

NAME	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SAFFRON	Croci Stigmata	Deep reddish yellow substance, having the appearance of shreds, with a slight peculiar odour and taste.	Used for colouring and flavouring liquid dentifrices. The Tincture of Saffron may be prescribed in mouth-washes (1 or 2 drs. to 4 oz.) imparting to them a pleasing yellow tinge.		The dried stigmas and tops of the Crocus Sativus.
SALICIN	Salicinum	Colourless, tabular or slender needle-shaped crystals, having a very bitter taste. Slightly soluble in water and less in alcohol.	Antipyretic. Is better tolerated than the salicylates in rheumatic affections, and hence its use is indicated in certain secondary conditions resulting from Pyorrhœa Alveolaris.	5 to 20 grs. in powder, tablets or preferably cachets.	A glucoside obtained from the bark of various species of Willow and Poplar.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SALICYLATE OF METHYL	Methyl Salicylas	A colourless or slightly yellowish oily liquid with a characteristic odour and taste. Soluble in alcoholic liquids and oils.	Antiseptic and flavouring agent. Used as a substitute for the more expensive Oil of Wintergreen. For tooth powders and pastes about 1 drop to the oz. is recommended. May be mixed with oils and liniments for external application in neuralgic and rheumatic affections. For direct application to the temporo-mandibular joint in arthritis it should be sprinkled on lint and covered with oiled silk.		Artificial Oil of Wintergreen. Is prepared by substituting the displaceable Hydrogen of Salicylic Acid by Methyl (CH_3).

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
SALIPYRIN	Salipyrinum	Hexagonal crystals or a white crystalline, odourless powder. Sparingly soluble in water, soluble 1 in 4 alcohol.	Antipyretic, Analgesic. Useful in neuralgia and painful rheumatic conditions.	10-30 grs. In powder or cachet.	Salicylate of Antipyrin.
SALOL	Salol	A white crystalline powder of a faintly aromatic odour and sweetish taste. Almost insoluble in water, freely soluble in alcohol.	Antipyretic, Antiseptic. May be used as a dusting powder in place of Iodoform. Is an ingredient in some liquid dentifrices on account of its agreeable flavour; these turn milky when added to water. Is given internally as an intestinal disinfectant, and is decomposed into Carbolic and Salicylic	5-15 grs. In powder, tablets or cachet.	Salicylate of Phenyl.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE,	DESCRIPTION.
SALOL *(contd.)*			acids by the alkalinity of the small intestine. Has been recommended in acute and chronic rheumatism.		
SAL VOLATILE		*vide* Spirits of Ammonia.			
SALT		*vide* Sodium Chloride.			
SALTS, EPSOM	Magnesii Sulphas.	Small, colourless, odourless, translucent rhombic or acicular crystals having a bitter saline taste. Freely soluble in water.	Saline cathartic, a mild and safe hydragogue purgative. Especially indicated in acute alveolar abscess, acting more promptly and powerfully where given on an empty stomach. Also useful in lead poisoning and septic conditions generally. Is an ingredient in Black Draught *q.v.*	½ to 2 drs. for repeated administration. For a single dose ¼ to ½ oz. in a wine-glass of hot water.	Prepared from native Dolomite by the action of Sulphuric Acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SALTS, GLAUBER	Sodii Sulphas	Colourless, transparent efflorescent, monoclinic prisms with a bitter cooling saline taste. Soluble 1 in 3 parts of water.	A powerful hydragogue cathartic. Its action being frequently accompanied by griping it is not generally so suitable as Epsom Salts. Its use is indicated in similar conditions and may be administered with a small quantity of Tincture of Ginger (15 minims).	$\frac{1}{2}$ to 2 drs. repeated, $\frac{1}{4}$ to $\frac{1}{2}$ oz. for a single dose	Prepared from the residue left in the manufacture of Hydrochloric Acid by neutralising with Carbonate of Soda.
SERA	Sera	Almost colourless, transparent liquids, sometimes cloudy and having the odour of a preservative agent.	To produce a condition of passive immunity in certain infectious diseases *e.g.* Diphtheria, Tetanus, Erysipelas, Ludwig's Angina.	Varying	Sera are either (*a*) antitoxic or (*b*) antibactericidal. The former are prepared by injecting toxins subcutaneously into a healthy animal until active im-

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SERA, (*contd.*)					munity is obtained. The latter by injecting cultures of bacteria. The animal is subsequently bled and the serum separated and standardised.
SERUM, NORMAL HORSE	Serum	A clear colourless fluid.	To increase the coagulibility of the blood, it is said to produce a rapid increase of hæmoglobin and corpuscles. Is indicated in Anæmia, Hæmophilia, and Hæmorrhages. May be given by the mouth, rectum or subcutaneously.	From 10 ccs. to 150 ccs.	Prepared by separation from the blood of a healthy horse.

NAME	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SILVER NITRATE	Argenti Nitras	Colourless, transparent tabular rhombic crystals. Freely soluble in distilled water, 1 in 24 alcohol. Darkens on exposure to light. (*vide* Poison Table).	Caustic for superfluous granulations, mucous patches, ulcers and allied affections. Coagulant of the dentinal fibrils, and may be applied by fusing a crystal on an old ball burnisher to unnaturally exposed and sensitive dentine and cementum. When using, the part should be isolated to protect the gum, &c., from injury. A glass of warm salt water should be at hand for the patient to freely rinse the mouth after the application.	*	$Ag\,NO_3$ Prepared by the action of Nitric Acid on refined silver.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
SOAP, HARD	Sapo Durus	A white or whitish solid with a characteristic appearance and dry saponaceous touch.	Chiefly used as an ingredient in dentifrices, from 10 to 20% being a suitable quantity.	★	Prepared by the interaction of Olive Oil and Soda.
SOAP, SOFT	Sapo Mollis	A yellowish white or yellowish green unctuous semi-solid.	Soft Soap is used in several liniments (*q.v.*) and for making ether and other liquid soaps.		Prepared by the interaction of Potash and Olive Oil.
SOAPSTONE (Talc)		*vide* French Chalk			
SODA, CAUSTIC		*vide* Sodium Hydroxide			
SODA, WASHING		*vide* Sodium Carbonate			

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SODIUM BENZOATE	Sodii Benzoas	A white, amorphous powder; may have a slight odour of Benzoin. Freely soluble in water.	Mild antiseptic, an excellent constituent of liquid dentifrices and mouthwashes, 5 or 10 grs. to the ounce being recommended.	*	Prepared by neutralising Benzoic Acid with a Solution of Carbonate of Soda.
„ **BIBORATE** (*vide* Borax)					
„ **BICARBONATE**	Sodii Bicarbonas.	Small opaque prismatic crystals, or more frequently an odourless, white, micro-crystalline powder with a saline taste and alkaline reaction. Soluble 1 in 12 parts of water. Insoluble in alcohol.	Antacid. As an ingredient in mouthwashes (10 grains-1 ounce) where an alkaline solution is desirable. After clearing root-canals with acid a strong solution should be used previous to irrigating with warm water. Is useful as an application in many cases of (*contd.*)	5 to 30 grs.	$NaHCO_3$ Prepared by saturating a solution of Carbonate of Soda with Carbonic Acid Gas.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SODIUM BICARBONATE (*contd.*)			hypersensitive dentine or cementum at cervical margins. When it is proposed to allow a thin layer of decalcified dentine covering the pulp to remain—a saturated solution should be applied previous to antiseptics. (*vide* Hist. Sect.)		
„ **BROMIDE**	Sodii Bromidum	Minute white crystals or a white crystalline powder, having a saline and slightly bitter taste. Freely soluble in water.	Sedative, hypnotic. Useful in hysteria and neuralgia. Its medicinal properties are similar to Potassium Bromide (*q.v.*) but is less depressant and more easily tolerated by the stomach.	5 to 30 grs.	Prepared by crystallisation from the fused products of a mixture of Bromine and Solution of Soda.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SODIUM CARBONATE	Sodii Carbonas	Colourless, translucent, efflorescent, monoclinic crystals, having a caustic taste and strong alkaline reaction. Freely soluble in water.	May be beneficially added to the water used for sterilising instruments in the proportion of about 5 grs. to the oz.	*	Obtained from Chloride of Sodium by reaction with Bicarbonate of Ammonium and subsequent ignition.
,, **CHLORIDE** (COMMON SALT)	Sodii Chloridum	White cubical crystals, or more usually a white crystalline powder with a strong saline taste and neutral reaction. Readily soluble in water.	Is useful as an emetic ($\frac{1}{2}$ to 1 oz.) when dissolved in warm water. A valuable antidote to Silver Nitrate (*q.v.*) Is the chief ingredient in normal Saline Solution (78.75 grs. to 1 pint). As a gargle, and is recommended for gently brushing inflamed and bleeding gums.	*	Found native.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SODIUM HYDROXIDE (CAUSTIC SODA)	Sodii Hydroxidum	White deliquescent sticks or cakes. Freely soluble in water.	May be used similarly to Caustic Potash, *q.v.*	*	Obtained by boiling down Solution of Soda.
„ **HYPOSULPHITE**(THIOSULPHATE)	SodiiHyposulphis	Colourless, transparent monoclinic prisms, having a cooling and somewhat bitter sulphurous taste. Freely soluble in water.	Removes stains produced by Silver Nitrate, decolourises Iodine solutions forming a double salt. Fixing salt for radiographic plates and films.	*	Formed from Sodium Sulphite by the addition of Sulphur.
„ **PEROXIDE**	Sodii Peroxidum	A whitish amorphous powder which dissolves in water with a hissing noise, evolving heat and forming Peroxide of Hydrogen. Rapidly deliquescent.	A powerful oxidising agent. For bleaching teeth and sterilising root canals, it may be worked into the cleared canals and moistened with water, (*contd.*)		$Na_2 O_2$ Obtained by passing air over Metallic Sodium at a temperature of 400° Cent.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SODIUM PEROXIDE (*contd.*)			afterwards thoroughly syringing with warm water. For disorganising remnants of pulp tissue. To facilitate its application it may be made into a paste with Chloroform, the latter being made to evaporate, the powder is left where it is required. Steel instruments should not be used.		
,, **PHENATE**		*vide* Solution of			
,, **SULPHATE**		*vide* Glauber Salts			

Name.	Latin Nomenclature	Characters.	Use	Dose.	Description.
SOLUTION OF AMMONIA	Liquor Ammoniæ	A clear colourless liquid containing 32-35% by weight of Ammonia Gas (NH_3) forming the strong solution — the weaker official solution contains 10%. Has a characteristic pungent odour, a powerful caustic taste and a strongly alkaline reaction.	A general stimulant. May be applied to the nostrils in Syncope. Is the pungent factor in Smelling Salts and an ingredient in Ammoniated Tincture of Quinine. Decolorises Iodine solutions forming a double salt.	10-20 minims of the weaker solution.	Prepared by passing Ammonia Gas into water.
,, **CARMINE**	Liquor Carmini	A deep red solution usually having a slight ammoniacal odour.	Colouring agent. Useful for plaster impressions — a few drops should be mixed with the water; also for dentifrices imparting to them a pleasing rose tint.		Prepared by dissolving Carmine (6-100 parts) in water and glycerine by the aid of Solution of Ammonia.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SOLUTION, DOBELL'S	Liquor Sodii Boratis Compositus	A clear liquid with odour of Phenol.	Antiseptic. A teaspoonful added to a small tumbler of warm water makes a good stimulating antiseptic mouthwash, especially indicated after extractions.		Composed of :— Borax, 15 parts. Bicarbonate of Soda, 15 parts. Carbolic Acid, 3 parts. Glycerine, 35 parts. Water, to 1000 parts.
,, **GUTTA PERCHA** (CHLORO-PERCHA)		*vide* Gutta Percha			
,, **HYDROGEN PEROXIDE**		*vide* Peroxide of Hydrogen			

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SOLUTION OF IODINE.	Liquor Iodi Fortis	A deep brown solution with characteristic peculiar odour. Stains linen and skin deeply.	Antiseptic, deodorant, counter-irritant, and is chiefly used as an application to the gums in cases of acute pulpitis or periodontitis; for this purpose it may be mixed with an equal quantity of Tincture of Aconite (Flemming). Valuable in Actinomycosis and efficacious in all chronic inflammatory conditions of the Periodontal Membrane. As a rule this solution is too strong for indiscriminate use or to trust to		A solution of Iodine in alcohol and water by the aid of Iodide of Potassium. Its strength is 1 in 8½ parts.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
SOLUTION OF IODINE, (*contd.*)			a patient. Where the Tincture of Iodine (*q.v.*) is too weak, equal parts of the Tincture and Solution is recommended. Iodism may be caused in some persons by its too free use, as Iodine is readily absorbed when applied to mucous membranes.		
„ **OF IODINE COMPOUND** U.S.P.	Liquor Iodi Compositus	*vide* Solution of Iodine.	*vide* Solution of Iodine Being an aqueous solution of suitable strength, is perhaps preferable to the B.P. preparations for dental purposes.		5% of Iodine in a 10% aqueous solution of Iodide of Potassium.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SOLUTION OF LIME, (LIME WATER)	Liquor Calcis	A clear, colourless, odourless liquid, having a slight saline taste. On exposure to the air it quickly becomes cloudy, due to the formation of Carbonate of Lime, and is then useless.	Antacid, astringent, sedative. Especially useful in vomiting for women and children. Recommended for application on a soft brush to the gums in chronic catarrh. Given with milk to infants, supplies the deficiency of lime salts, which may cause rickets and imperfectly calcified teeth. Mixed with Linseed Oil forms Carron Oil, an excellent application for burns and scalds	1 to 4 ozs.	A solution of washed slaked lime in water. Contains ½ gr. of Oxide of Calcium in each oz.

NAME	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SOLUTION OF MORPHINE ACETATE	Liquor Morphinæ Acetatis	A water-white liquid with faint acetous odour and bitter taste.	Morphia has but a limited use in dentistry, it is sometimes added to pulp devitalisers, but is of doubtful action. The two official solutions here given are the most serviceable for administration by the mouth. Morphia is an Analgesic and Hypnotic and is less apt, than opium, to disturb the digestion or cause constipation, headache or nausea. Children are very susceptible to its action.	10 to 16 minims.	A 1% solution of Acetate of Morphia in alcohol and water.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SOLUTION OF MORPHINE ACETATE (*contd.*)			The administration is more within the domain of the general practitioner. A small dose of 10 minims may be given from time to time to relieve bad neuralgic pains and aid sleep.		
,, **MORPHINE HYDRO-CHLOR**	Liquor Morphinæ Hydrochloridi	A water white liquid, without odour but with a bitter taste. (*vide* Poison Table).		10 to 16 minims.	A 1% solution of Hydrochloride of Morphia in alcohol and water.
,, **MORPHINE TARTRATE** (HYPODERMIC)	Injectio Morphinæ Hypodermica	A clear liquid without odour but with a bitter taste.	A hypodermic injection given judiciously before the administration of a general anæsthetic decreases the susceptibility of the patient to shock.	2-5 minims injected subcutaneously	A 5% solution of Tartrate of Morphia in destilled water.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SOLUTION OF OPIUM, SEDATIVE	Liquor Opii Sedativus	A dark brown liquid with the slight characteristic odour of opium and a bitter taste.	Anodyne and sedative. A stronger preparation than the Tincture *q.v.* May be given when pain is exceedingly severe to give relief and rest.	5 to 20 minims	Prepared by maceration of Opium in alcohol, sherry and water, with calcium hydrate.
,, **PERCHLORIDE OF IRON**	Liquor Ferri Perchloridi	A brown liquid having a strongly astringent taste. Readily miscible with water and alcohol.	Tonic, styptic, hæmostatic and astringent (a stronger official solution—Liq. Ferri Perchlor. fort—may be used as an escharotic). As a general tonic may be prescribed with a little Glycerine or Chloroform water. (*contd.*)	5-15 minims	Prepared by the action of Hydrochloric Acid on Iron Wire and subsequent treatment with Nitric Acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE	DOSE.	DESCRIPTION.
SOLUTION OF PERCHLORIDE OF IRON (*contd.*)			Sulphate of Quinine will dissolve in it readily, and the two combined make an excellent tonic. It should be well diluted and taken through a glass tube on account of its deleterious action on the teeth. Mixed with an equal part of Glycerine it forms a good paint in faucal inflammation. Highly useful in anæmia. For arresting hæmorrhage after extractions may be used on a pellet of wool, but is not generally advised. (*vide* also Tincture of Iron).		

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SOLUTION OF POTASH	Liquor Potassæ	A clear, colourless and odourless strongly alkaline solution.	Caustic. Combines with Carbolic Acid, forming solution of Phenate of Potash, *q.v.*	*	Prepared by the interaction of Carbonate of Potash and Slaked Lime in water. Contains 6% of pure Potassium Hydroxide.
,, **POTASSIUM PHENATE**	Liquor Potassii Carbolatis	An almost colourless liquid with the characteristic odour of Phenol. Turns a brownish colour with keeping.	Antiseptic, Anodyne. One teaspoonful in a small tumblerful of warm water makes an excellent mouth-wash for use after bad extractions.		Consists of :— Carbolic Acid, 4 drs. Solution of Potash, 6 drs. Water, to 4 ozs.
,, **SODIUM PHENATE**	Liquor Sodii Carbolatis	Resembles solution of Potassium Phenate.	Resembles solution of Potassium Phenate which is more generally used.		Consists of :— Carbolic Acid, 4 drs. Solution of Soda, 6 drs. Water, to 4 ozs.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
SOLUTION OF STRYCHNINE	Liquor Strychninæ Hydrochloridi	A colourless and odourless liquid with an acid reaction and very bitter taste. (*vide* Poison Table).	Cardiac and respiratory stimulant, and a general tonic. As a tonic it may be given in small doses of three minims with a little Syrup of Orange and water. In neuralgia is frequently prescribed in combination with Citrate of Iron and Quinine. Two minims may be injected subcutaneously for peripheral paralysis, and five minims, repeated if necessary, in cases of syncope.	2-8 minims	A 1% solution of Strychnine in dilute Hydrochloric Acid, water and alcohol.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SPIRITS OF AMMONIA, AROMATIC (SAL VOLATILE)	Spiritus Ammoniæ Aromaticus	A clear, almost colourless liquid, having a strong ammoniacal odour and taste.	A cardiac and respiratory stimulant. Its action is due to the Ammonia gas liberated. It acts quickly, and is an invaluable remedy in syncope and collapse. It is the least disagreeable form of administering Ammonia, and a teaspoonful is recommended to be given well diluted with water.	20-40 minims repeated. 60-90 minims as single dose.	An aromatic solution of Ammonia in alcohol and water, together with the Oils of Nutmeg and Lemon.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
SPIRIT OF CHLOROFORM	Spiritus Chloroformi	A clear, colourless liquid with the characteristic odour and taste of Chloroform.	Sedative, carminative and antispasmodic. It may be given in small doses with Aromatic Spirits of Ammonia. Is frequently used in mixtures and liquid dentifrices as a sweetening agent.	5 to 20 minims repeated. 30 to 40 minims as a single dose.	A solution of Chloroform 1 part in alcohol (90%) to make 20 parts.
,, **METHYLATED**	Spiritus Methylatus	A clear nearly colourless mobile, volatile and inflammable liquid having a distinctive spirituous odour mingled with that of Naphtha and Petrol. Turns cloudy when added to water.	May be used in place of Rectified Spirits of Wine in liniments. Is mixed with Rouge for polishing metal work. For the spirit lamp. Is recommended for bleaching pink vulcanite gum by allow- *(contd.)*		Alcohol to which a fixed percentage of Petroleum Oil and Wood Naphtha are added.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
SPIRIT METHYLATED (*contd.*)		May be procured for medicinal purposes without the Petrol which is added to make it too nauseous to drink.	ing the denture to stand in it exposed to sunlight.		
,, **OF NITROUS ETHER**	Spiritus Etheris Nitrosi	A transparent pale yellow or greenish yellow mobile, volatile and inflammable liquid. Has a pleasant ethereal odour and a burning taste.	Stimulant, diaphoretic, diuretic and antipyretic. Has no great use in dental surgery but is given to children in quite small and frequent doses, well diluted, in convulsions during the eruptive period of the temporary teeth. It is commonly used as a diaphoretic and is a household remedy.	20-40 minims repeated. 60-90 minims as a single dose.	A spirituous solution containing Nitrous Compounds, Aldehyde, and other substances.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SPIRITS, RECTIFIED (Alcohol 90%)	Spiritus Vini Rectificatus	A transparent, colourless, mobile, volatile and inflammable liquid having a distinctive spirituous odour and burning taste.	Stimulant in syncope and shock. Antiseptic and Astringent. A solvent for Camphor, Balsams, Iodine, Essential Oils, &c.; hence its great use in toothache remedies and liquid dentrifices. Used largely for the preparation of liniments and tinctures. Mixed with Lead or Camphor Water it makes a good evaporating and, hence, cooling lotion. (*vide* Hist. Sect.)		Prepared by the distillation of fermented saccharine fluids.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
STAINS		*vide* Histological Section			
STANNIC OXIDE		*vide* Tin, Oxide of			
STEEL DROPS		*vide* Tincture of Iron			
STRYCHNINE	Strychnina	Translucent, colourless, rhombic, prisms or a white crystalline powder. Odourless, with an intensely bitter taste. Sparingly soluble in water. (*vide* Poison Table).	Cardiac and respiratory stimulant. The chief means by which a dental surgeon may be called to administer Strychnine is by hypodermic injection. Standardised tablets of a soluble salt ($\frac{1}{60}$ grain) are prepared for this purpose and the use of the pure drug should be avoided. Is a valuable remedy	$\frac{1}{60}$—$\frac{1}{15}$ gr.	An alkaloid prepared from Nux Vomica seeds.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
STRYCHNINE *(contd.)*			in cases of poisoning by such drugs as Cocaine, Opium, Morphia, Chloral, Ether, Chloroform, and Ethyl Chloride, which depress the cardiac and respiratory centres. (*vide* Solution of Strychnine).		
STYPTICIN	Cotarninæ Hydrochloridum	A pale yellow crystalline powder. Soluble in water and alcohol.	Used internally to arrest hæmorrhages rapidly. A saturated solution is recommended to be applied on a plug of wool to tooth sockets.	$\frac{1}{3}$ to $\frac{1}{2}$ gr. in cachet, or by hypodermic injection.	Stypticin is produced by the oxidation of Narcotine and subsequent treatment with Hydrochloric Acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
STYPTOL	Cotarninæ Phthalas	A micro-crystalline powder soluble in water.	Standardised tablets are prepared for hypodermic injection. Styptol is said to be less irritating than Stypticin.	$\frac{3}{4}$ gr. four to six times a day internally, 3 grs. subcutaneously.	Styptol is prepared by the oxidation of Narcotine and subsequent treatment with Phthalic Acid.
SULPHONAL	Sulphonal	A colourless, odourless and almost tasteless crystalline powder, and also in prismatic crystals. Sparingly soluble in cold water.	Hypnotic for simple insomnia when pain is absent. Being cumulative it is not recommended for continued use, poisoning being fairly frequent.	10 to 30 grs. in cachets, hot milk or warm alcoholic drinks.	Diethylsulphondimethyl-methane. A product of the condensation of Acetone with Ethyl Mercaptan.
SULPHUR, ROLL	Sulphur Rotundum	Sulphur moulded into thick rolls, and having the characteristic yellow colour.	Used chiefly in the laboratory for fixing tube teeth.		Prepared by purification from crude native Sulphur.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
SUPRARENAL EXTRACT		*vide* Adrenalin.			
SWEET NITRE		*vide* Spirit of Nitrous Ether.			
SYRUP, EASTON'S	Syrupus Ferri Phosphatis cum Quinina et Strychnina	A pale yellowish green, syrupy liquid, having a very bitter and acid taste and a strong fluorescence.	General tonic, possessing the combined therapeutic properties of Iron, Quinine and Strychnine. Its administration is indicated in obstinate neuralgia and general debility from all causes.	$\frac{1}{2}$ to 1 dr. well diluted after food.	Each fluid drachm contains :— $\frac{1}{32}$ gr. of Strychnine. $\frac{4}{5}$ gr. of Quinine Sulphate.
SYRUP, FELLOW'S		*vide* Syrup of Hypophosphites, compound.			

Name.	Latin Nomenclature	Characters	Use.	Dose.	Description.
SYRUP of **HYDRIODIC ACID**	Syrupus Acidi Hydriodici	Faintly straw coloured syrupy liquid, with peculiar taste and flavour of orange.	Recommended as being more active than the alkaline iodides and is indicated in syphilitic affections, especially following prolonged treatment with mercury.	20 to 40 minims.	Contains 1% of Hydriodic Acid (HI). It is made by decomposing an alcholic solution of Iodine in Syrup by means of sulphuretted hydrogen and is flavoured with orange.
of **HYPOPHOSPHITES** Compound (Fellow's)	Syrupus Hypophosphitum Compositus	A pale yellowish green syrupy liquid having a bitter and slightly acid taste with a strong fluorescence caused by the quinine it contains.	A general tonic, is as a rule better tolerated by the stomach than Easton's syrup which it somewhat closely resembles in its medicinal properties. Is indicated in debility following neuralgia and allied affections.	$\frac{1}{2}$ to 1 dr. well diluted after meals.	Each fluid drachm contains $\frac{1}{160}$ gr. of Strychnine; $\frac{1}{8}$ gr. of Quinine Phosphate.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
SYRUP OF PHOSPHATES COMPOUND (PARRISH'S CHEMICAL FOOD)	Syrupus Phosphatis Compositus	A sweet dark red syrupy liquid with slightly metallic taste.	General tonic—Recommended for its suitability for children and may be given in conjunction with Cod Liver Oil in cases of glandular affections or general weakness.	½ to 1 dr. in water directly after food.	A syrupy solution of the Phosphates of Iron, Potash, Calcium and Sodium.
SYRUP, TRIPLE	Syrupus Triplex	A brownish syrupy liquid with a metallic and bitter taste.	General tonic—Possessing the combined properties of the three syrups of which it is composed.	½ to 1 dr. well diluted with water, and taken after meals.	A mixture of Easton's, Fellow's and Parrish's Syrups.

NAME.	LATIN NOMENCLATURE	DESCRIPTION.
TABLETS	Tabellæ	Tablets are now made from most drugs and vary in size according to the dose. They should be crushed before being swallowed, except in cases where the tablet is to be allowed to slowly dissolve in the mouth in order that its effect may be prolonged locally—such as Chlorate of Potash, Formaldehyde, Borax, &c. Tablets of Aspirin, Antipyrin, Phenalgin, Sulphonal, and allied drugs are especially convenient for travellers. Hypodermic tablets of Strychnine, Morphia and Apomorphine are standardised for the convenience of practitioners. Tablets of Mouth Washes are occasionally a convenience, and Antiseptic lotions and washes are readily prepared of a uniform strength from tablets.
TANNIC ACID		*vide* Acid Tannic.
TARTAR SOLVENT		*vide* Ammonium Bifluoride.
THEOBROMA		*vide* Cocoa Butter.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
THYMOL	Thymol	Large, colourless, translucent, oblique, rhombic prisms, having a distinctive somewhat agreeable thyme-like odour and a burning aromatic taste. Soluble in alcohol. Insoluble in water.	A powerful antiseptic and deodorant. Has a preservative action on dead animal tissue, hence its value in Mummifying Pastes. Has local analgesic properties. Is largely used in mouth washes and dentrifices, about 1 gr. to the oz. being a suitable proportion. An alcoholic solution in root treatment is excellent.		A stearoptene obtained from Volatile Oils of the Thyme and other plants of allied species.
THYROID GLAND (*vide* Extract of)					

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TIN, OXIDE OF (PUTTY POWDER)	Stanni Oxidum	A heavy, greyish white powder, without odour and insoluble in the usual media.	Is recommended for polishing porcelain.		Occurs native.
TINCTURE OF ACONITE	Tinctura Aconiti	A dark brown alcoholic liquid with a peculiar odour and taste. (*vide* Poison Table.)	Anodyne, Antipyretic, Sedative. Is a useful application in conjunction with an equal part of Solution of Iodine to relieve acute pulpitis or periodontitis. May advantageously be used when mixed with Liniment of Soap in facial neuralgia.	5-10 minims.	Prepared from Aconite root by percolation with Alcohol.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TINCTURE OF ACONITE (FLEMING)	Tinctura Aconiti (Fleming)	Resembles Tincture of Aconite.	Resembles Tincture of Aconite, but is a more suitable strength to use for applying to the gums in conjunction with Iodine.		(*vide* Tinct. Aconite.) Approximately the same strength as Liniment of Aconite.
,, OF **BELLADONNA**	Tinctura Belladonnæ	A dark brown liquid with slight odour and peculiar taste. (*vide* Poison Table.)	Anodyne, Analgesic. Depressant to all highly organised tissues, exerting an analgesic and anti-secretory influence. It is useful when mixed with Iodine as an application to the gums in periodontal diseases; and is recommended as an external application either alone or	5-15 minims.	Contains .048 to .052% of alkaloids, chiefly Atropine. Prepared from the official liquid extract by dilution with 60% alcohol. Is much weaker than the Liniment, *q.v.*

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
TINCTURE OF BELLADONNA (*contd.*)			mixed with one of the mild liniments as soap or camphor in facial neuralgia. This tincture is chiefly dependent for its action on the alkaloid Atropine, *q.v.*		
,, OF **CANNABIS INDICA** (INDIAN HEMP)	Tinctura Cannabis Indicæ	A dark green alcoholic solution of peculiar odour, forming a resinous precipitate on its addition to water.	Sedative and Anodyne. Recommended in neuralgia, and taken in frequent small doses it tends to ward off further attacks.	5 to 16 minims.	Prepared from Extract of Indian Hemp (1 in 20), which is obtained by maceration from the dried flowering or fruiting tops of the female plants of Cannabis Sativa.
,, OF **CHLOROFORM AND MORPHIA** (*vide* Chlorodyne)					

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TINCTURE OF DIGITALIS	Tinctura Digitalis	A dark spirituous liquid with faint peculiar odour and taste. (*vide* Poison Table).	A powerful cardiac, and circulatory stimulant and tonic. Should be given with caution as its action is cumulative. (*vide* Tincture of Strophanthus).	5 to 15 minims.	Prepared by percolation of Digitalis leaves with 60% Alcohol.
,, OF **GELSEMIUM**	Tinctura Gelsemii	A clear, light brown spirituous fluid of characteristic odour and taste.	Is said to be a specific in trigeminal neuralgia. Is recommended to be prescribed in 5 min. doses with 10 grain doses of Citrate of Iron and Quinine.	5 to 20 minims.	Prepared by macerating Gelsemium in Proof Spirit.
,, OF **HAMAMELIS** (*vide* Tincture of Witch Hazel)					

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
TINCTURE OF IODINE	Tinctura Iodi	A deep brown spirituous liquid which readily stains the skin and linen. It has a slight peculiar odour and taste and is miscible with other spirituous preparations, water and glycerine.	Antiseptic, deodorant, disinfectant, counterirritant and vesicant. Is recommended as an application, to the gum in acute pulpitis and periodontitis, around the necks of the teeth when scaling, and to suppurating pockets in Pyorrhœa Alveolaris. A solution of 1 in 50 makes an excellent lotion for washing out cystic cavities and as a mouth wash or gargle in ulcerative conditions. It may also	★	A 1 in 40 solution of Iodine in Alcohol, the solution being effected by the aid of Iodide of Potassium.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TINCTURE OF **IODINE** *(contd.)*			be advantageously used in conjunction with Tincture of Aconite or Belladonna in inflammatory and painful conditions. Is recommended as an application to the teeth of children and invalids before and during the operation of cleaning to facilitate the removal of mucoid secretions. Is best applied with aluminium tweezers.		

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
TINCTURE OF **IODINE, DECOLOURISED**	Tinctura Iodi Decolorata	A clear, colourless solution, usually with an ammoniacal odour. Tincture of Iodine may also be decolourised with Hyposulphite of Soda when it is odourless.	This preparation is practically useless in dental surgery, the free Iodine being replaced by a double salt in the process of decolourising.		A solution of Ammonium Iodide and Iodate when Liquor Ammonia is, as is most common, used as the decolourising agent.
,, OF **IRON** (Steel Drops)	Tinctura Ferri Perchloridi	A reddish brown, somewhat spirituous liquid, with a strong styptic taste. Readily miscible with water.	Astringent, Tonic, Styptic, Hæmostatic. Useful in passive hemorrhage. A general tonic during convalescence and useful in anæmias. The Liquor Ferri Perchlorid is most suitable for applications as it contains	5 to 15 minims well diluted.	Prepared from the official strong Solution of Perchloride of Iron by dilution with water and alcohol.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TINCTURE OF IRON (*contd.*)			no alcohol—otherwise the two preparations are alike. Quinine readily dissolves in it and makes a good combination for a tonic in neuralgic affections.		
,, OF **MYRRH**	Tinctura Myrrhæ	A brownish yellow spirituous liquid, having an agreeable aromatic odour and a bitter acrid taste.	Astringent and Antiseptic. Stimulant to the mucous membrane. As a mouth wash with Borax or Chlorate of Potash and a little Glycerine is useful in Gingivitis and Stomatitis.	*	Prepared from Gum Myrrh by maceration and percolation with alcohol.

Name.	Latin Nomenclature	Characters.	Use.	Dose.	Description.
TINCTURE OF MYRRH AND BORAX	Tinctura Myrrhæ et Boracis	A deep brown spirituous solution with a pleasant odour and bitter taste.	A few drops added to a small quantity of warm water makes an excellent mouth wash and is a simple, agreeable and efficacious preparation in slight inflammatory conditions of the buccal mucous membrane.		A mixture of Tincture of Myrrh, Borax and Eau de Cologne.
,, OF **NUX VOMICA**	Tinctura Nucis Vomicæ	A clear light brown spirituous liquid with faint peculiar odour and marked bitter taste. (*vide* Poison Table.)	A gastric and general tonic. A cardiac and respiratory stimulant. A valuable ingredient in medicines for chronic constipation, migraine, and general debility.	5 to 15 minims.	Prepared from the official Liquid Extract by dilution with water and 90% alcohol. Contains ·25% of Strychnine.
,, OF **OPIUM**		*vide* Laudanum.			

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TINCTURE OF RHATANY	Tinctura Krameriæ	A deep brownish yellow liquid with an agreeable odour and astringent taste.	Powerful astringent, due to the peculiar form of Tannic Acid it contains. May be added to mouth washes in simple general inflammatory conditions, spongy gums, mercurial and other stomatitic affections.	*	Prepared from Rhatany root by percolation with 60% alcohol.
,, OF **STROPHANTHUS**	Tinctura Strophanthi	A clear spirituous liquid with peculiar odour and bitter taste.	Cardiac tonic. Useful for promptly stimulating extreme or sudden cases of cardiac failure and is superior to Digitalis, being non-cumulative in action.	5 to 15 minims.	Prepared from Strophanthus seeds by percolation with 90% alcohol.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TINCTURE OF WITCH HAZEL	Tinctura Hamamelidis	A deep brown spirituous liquid with faint characteristic odour.	Local astringent and hæmostatic. May be used pure on a pellet of wool. For mouth washes the Solution of Witch Hazel (*q.v.*) is preferable.	*	Prepared from Hamamelis bark by percolation with 45% alcohol.
TRAGACANTH		*vide* Gum.			
TRIKRESOL	Trikresol	A yellow liquid with a tarry odour.	Disinfectant and antiseptic. In many instances is superior to Phenol. It is valuable for root canal dressings and may be used for stimulating sinuses in alveolar abscesses. Is an ingredient in many preparations for treating putrescent pulp canals.		A mixture of three isomeric Cresols obtained from Coal Tar.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
TRIONAL	Trional	A white crystalline powder with a faintly bitter taste. Sparingly soluble in water, 1 in 12 alcohol. (*vide* Poison Table.)	A pure hypnotic like Sulphonal, but being more soluble acts more rapidly. Has a tendency to accumulate in the body, and is therefore more poisonous than Sulphonal.	10 to 30 grs. in powder or cachet.	Methyl-Sulphonal.
UREA	Urea	Colourless, transparent, almost odourless prismatic crystals, somewhat hygroscopic, and having a cool saline taste. Readily soluble in water.	Its salts have been used in conjunction with Quinine as a local anæsthetic, but its indiscriminate use is not recommended. Employed in medicine as a solvent for Uric Acid Calculi, &c.	20 to 60 grs.	Carbamide. Urea was the first human organic substance to be synthesised by heating Cyanate of Ammonium.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
VACCINE	Vaccina	A clear, saline fluid usually containing a small percentage of a disinfectant which imparts to it a characteristic odour.	For prophylactic treatment or for chronic or sub-acute infections. Frequently indicated in general conditions arising from oral sepsis.		A standardised sterilised emulsion of killed bacteria. An Autogenous Vaccine is one prepared from the micro-organism or organisms isolated from the patient. Stock Vaccines may be obtained but are not recommended.
VASELINE		*vide* Paraffin—Soft.			
VERONAL	Veronal	Colourless, odourless crystals, or a white crystalline powder with a faintly bitter taste. Slightly soluble in water. (*vide* Poison Table.)	Hypnotic and sedative but fails when there is much pain. It is cumulative in action and should be prescribed with caution.	5 to 20 grs. in powder or cachet.	Diethyl - malonyl urea.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ZINC CHLORIDE	Zinci Chloridum	A white granular powder, or fused mass, or sticks. Very deliquescent, odourless, and having a caustic metallic taste. Freely soluble in acidulated (HCl.) water and alcohol.	Astringent, antiseptic, disinfectant, caustic and styptic. In form of stick points it may be applied with care to indolent ulcers. Is obtundent to sensitive dentine, but should not be applied too near the pulp. A varnish containing 1 part in 60 parts of Chlorof-Mastich is most useful in cases of abrasion, attrition and erosion. Is an ingredient of the liquid of Oxychloride cement for filling root canals, &c. As a mouth		Prepared by the interaction of Zinc and Hydrochloric Acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ZINC CHLORIDE *(contd.)*			wash (grs. 2—1 oz.) is useful after extractions and in conditions of general gingivitis. Its astringent property, however, is not so great as has been considered and its continued use in the mouth changes the condition of the saliva. A 2% to 5% solution is recommended in ionic medication. A 5% solution may also be used to syringe out offensive pus cavities and sinuses.		

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ZINC OXIDE	Zinci Oxidum	A fine white amorphous powder without odour or taste. Insoluble in water and alcohol.	Mild astringent and antiseptic. An ingredient of all Zinc Phosphate cements and in many preparations for septic root canal treatment.		Prepared by the ignition of Carbonate of Zinc and subsequent sublimation.
ZINC SULPHATE	Zinci Sulphas	Colourless, transparent, somewhat efflorescent, rhombic or white acicular crystals, or a granular crystalline powder. Freely soluble in water.	Astringent, styptic, emetic and antiseptic. A 1% solution is useful in ulcerative stomatitis and cancrum oris. An ingredient of Oxysulphate of Zinc cement. A 2 to 5% solution is used in ionic medication.	As an emetic, 10 to 30 grs.	Prepared by the interaction of Zinc and Sulphuric Acid.

NAME.	LATIN NOMENCLATURE	CHARACTERS.	USE.	DOSE.	DESCRIPTION.
ZINC SULPHO-CARBOLATE	Zinci Sulpho-carbolas	Colourless, odourless, transparent prisms or tabular crystals, having an astringent metallic taste. Efflorescent and freely soluble in water and alcohol.	Antiseptic and astringent. A 10% solution is recommended as a stimulating antiseptic for the treatment of pyorrhœa pockets. Four grs. to the oz. makes a good mouth wash in general stomatitis.		Prepared by saturating a mixture of Carbolic and Sulphuric Acid with Oxide of Zinc.

PART II.

THERAPEUTIC TABLE.

FOR METHODS OF USE, CHARACTERS, AND OTHER PARTICULAR INFORMATION OF DRUGS INDICATED IN THE FOLLOWING INDEX, REFERENCE SHOULD BE MADE TO THE TABLES ON PAGES 2—154.

THERAPEUTIC TABLE.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
ABRASION	Milk of Magnesia. *Vide* Dentine, Hypersensitive.	Ant-Acid	This condition is rarely painful, treatment by drugs is therefore seldom required. Should the abraided surface, however, be sensitive Zinc Chloride varnish (*q.v.*) will be found a most useful application.
ABSCESS	Aconite and Iodine.	Counter-Irritant and Anodyne.	May aid resolution in the early stages.
(*a*) ACUTE ALVEOLAR	Hot-water Fomentations with Poppy-heads, Poultices of Bread, or Fig.	Assist Maturation.	To be applied *in* the mouth. Heat and moisture hasten maturation and determine pointing of abscess, assist formation of pus by facilitating escape of leucocytes and softening the tissues.

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
ABSCESS ACUTE ALVEOLAR (*contd.*)	Hot Antiseptic Mouth Washes, *q.v.*	Antiseptic.	Post-operative, or after spontaneous opening of abscess.
	Liquor Plumbi Subacetatis. Collodion flexile.	Astringent, Sedative and Protective.	To be applied to the skin externally if abscess shows signs of pointing on the face.
	Anti-Streptococcal Serum. *Vide* also Root Canals—Septic.	Procures passive immunity.	In the most acute cases of Streptococcal Infection. *Vide* Ludwig's Angina.
(*b*) CHRONIC (without Sinus)	Solution of Carbolic Acid, 1/200	Antiseptic.	To syringe out opened-up abscess cavity.
	Antiseptic Gauzes.	Antiseptic.	To plug the washed-out cavity and provide drainage.
	*Solution of Perchloride of Mercury, Alcohol, Cresol, Formaldehyde Solution 40%, Tri-Creso-formalin	Germicide.	To sterilise the root canals of the tooth in relation to the abscess, previous to filling.
	Thymol, Essentials Oils, Iodoform.	Antiseptic.	Tri-Creso-formalin consists of equal parts of Tri-Cresol and solution of Formaldehyde 40%.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
ABSCESS (*b*) Chronic (without Sinus) (*contd.*)	Ionic Medication.	Germicide, and stimulant.	By Ionic Medication or Cataphoresis is meant the treatment by electrolytically decomposed drugs. Salts of Zinc, Iodine and Copper are those most frequently employed in dental surgery.
(*c*) Chronic (with Sinus)	Solution of Silver Nitrate 10%.	Caustic-Astringent.	To be applied to the sinus track. Nitrate of Silver acts superficially as a caustic, its astringent action limiting its caustic action.
	Tincture of Iodine.	Irritant-Bactericide.	
	Peroxide of Hydrogen, 20 vols.	Bactericide.	To be syringed through the sinus, *viâ* the apical foramen of the tooth.
	Solution of Tri-Chloracetic Acid, 10-20%.	Stimulant.	
	Bismuth Paste.	Bactericide. Stimulant.	To be injected into the sinus after thorough cleansing.
	Electric Cautery.	Escharotic.	
	Ionic Medication.	Bactericide.	
	vide also (*b*).*		

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
ACID SALIVA	Peroxide of Hydrogen, 20 vols.	Mechanical	The Peroxide diluted with water, and used as a mouth-wash, by reason of the bubbling, frees the interproximal spaces from débris. Prophylactic and remedial. As this condition frequently arises in connection with gastro-intestinal disorders, general treatment may be necessary.
	Alkaline Mouth Washes.	Ant-Acid.	
	Milk of Magnesia.	Ant-Acid.	
	Alkaline Tooth Powders and Pastes.	Ant-Acid.	
ACTINOMYCOSIS	Iodide of Potassium.	Alterative.	Said to be a specific when taken internally in large doses, *i.e.*, from 20-60 grs. three times a day.
	Solution of Perchloride of Mercury 1/2000.	Antiseptic.	For local irrigations.
	Solution of Copper Sulphate 1%.	Astringent.	For local irrigations. Is also given internally in $\frac{1}{4}$ gr. doses, increasing gradually to 1 gr., three times a day.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
ANTRUM, Suppuration in (Empyæma)	Normal Saline Solution.	Removes mucous.	To be used previous to the antiseptic solution.
(*a*) Acute	Solution of Perchloride of Mercury 1/2000.	Antiseptic.	The antiseptic solutions are used hot, twice on the first day, and once a day afterwards. It is useful to vary the antiseptic.
	Solution of Carbolic Acid 1/200.	Antiseptic.	
	Solution of Boric Acid saturated (1 in 25).	Antiseptic.	
			The curative agents are to be used only after free opening has been made, and efficient drainage provided.
(*b*) Chronic	As for acute.		
	Bismuth Paste or Gauze.	Antiseptic and stimulant.	
	Vaccine.	Produces active immunity.	In stubborn cases autogenous vaccines have been found of service.
ATTRITION	*vide* Abrasion.		Pain is often present in the tooth. This may be due to the calcareous formations or "pulp-stones" which are frequently found in the pulp tissue.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
ACROMEGALY	Pituitary Gland Extract. Thyroid Gland Extract.	To supply insufficiency of the internal secretions of these ductless glands.	
BLEEDER	*vide* Hæmophilia.		
BLEEDING	*vide* Hæmorrhage.		
BREATH, Fœtor of	Permanganate of Potash and other Antiseptic Mouth Washes and Gargles. Inhalations of Eucalyptol, Menthol and Thymol.	Antiseptic and Deodorant.	Treat the local cause, or if due to a general disorder, general treatment should be advised.
BURNS	Glycerine.	Diluent and Demulcent.	For burns caused by drugs, such as Carbolic or Mineral Acids, demulcents and neutralising agents are indicated.
	Olive Oil and other Vegetable Oils.	Demulcent.	
	Carron Oil.	Demulcent and Antiphlogistic.	
	Bicarbonate of Soda.	Neutralising Agent.	

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
CALCULUS, Deposits of	Aromatic Sulphuric Acid. Tri-Chlor Acetic Acid, 25%. Ammonium Bi-fluoride, 2% Lactic Acid, pure.	Decalcifying agents.	Especially indicated for removing deposits around the necks of teeth and from the surfaces of the roots.
CANCRUM ORIS	*vide* Stomatitis—Gangrenous.		
CARIES of Dentine	Silver Nitrate.	Coagulant.	After excavation of the softened dentine, the application of one or other of these drugs will frequently produce a condition of artificial "arrested caries." This should be borne in mind when treating the teeth of children.
	Zinc Chloride.	Coagulant.	
	Acid Phosphoric.	Coagulant.	
	Absolute Alcohol.	Coagulant and Dehydrant.	
	Essential Oils.	Antiseptic.	
CONCUSSION	Tincture of Iodine.	Counter Irritant.	This treatment is sufficient when the periodontal membrane only is affected. Should the pulp become persistently irritated, its removal may be necessary.
	Solution of Iodine and Aconite Tincture.	Counter Irritant and Anodyne.	
	Capsicum Plaster.	Counter Irritant.	

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
COLLAPSE AFTER HÆMORRHAGE	Normal Saline Solution. *vide* Shock and Syncope.	Reinstates blood pressure.	Injected intravenously or subcutaneously. The blood pressure is raised by introducing into the circulation a sterile solution, rendered isotonic by the addition of Chloride of Sodium or the combined salts of the blood plasma. The method of supplying fluid to the body subcutaneously (Hypodermoclysis) is safer than by intravenous injection. Subcutaneous injections are best made in the thigh or abdomen. Intravenous injections must be made when the case is urgent, and the circulation so feeble that absorption is impossible. Intravenous injections are best made into the median basilic vein.
CYSTS	Antiseptic Gauze. Bismuth Paste.	Antiseptic, Bactericide and Stimulant.	The treatment is post-operative.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
DENTINE Decalcified	Tannic Acid.	Astringent.	In cases of deep carious cavities, where it is deemed expedient, treatment may be employed, with a view to preservation of the pulp.
	Bi-carbonate of Soda.	Ant-Acid.	
	Essential Oils.	Antiseptic.	
	Balsamic Varnishes.	Mechanical.	Seal the dentinal tubules.
DENTINE Hyper-Sensitive	Arsenious Acid.	Escharotic.	Escharotics should not be allowed to remain indefinitely in any cavity, otherwise irritation of the pulp will supervene.
	Chloride of zinc.	Escharotic.	
	Nitrate of Silver.	Escharotic.	
	Paraform.	Escharotic.	
	Carbolic Acid.	Escharotic and Anæsthetic.	The action of many of the agents used for obtunding sensitive dentine was formerly described as "coagulant," it being believed that sensation was transmitted by the protoplasmic dentinal fibril. In view of the recent demonstration of nerve fibrils in the dentine, the action of the agents used is described as either escharotic, anodyne or anæsthetic.
	Cocaine, its Salts and Analogues.	Anæsthetic.	
	Essential Oils.	Anodyne.	
	Absolute Alcohol.	Dehydrant.	
	Bi-carbonate of Soda.	Ant-Acid.	Neutralises the irritating acid, the product of bacteria.

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
DISCOLORATION OF TEETH	Peroxide of Hydrogen and its Analogues.	Bleaching agent.	Introduced into the cavity and evaporated by means of hot air. A little may be sealed in the cavity.
	Aluminium Chloride.	Bleaching agent.	Moistened with water, and placed in the cavity for five minutes. Syringe out with solution of Bi-carbonate of Soda.
	Chlorinated Lime, moistened with Acetic Acid.	Bleaching agent.	Wash out the cavity with an alkaline solution prior to sealing in the mix.
	Sulphurous Acid.	Bleaching agent.	To be used to swab out the cavity.
	Sulphite of Soda, with Boracic Acid.	Bleaching agent.	Mixed in the proportion of 10 parts to 7 parts respectively and inserted moist in the cavity, SO_2 is liberated.
DISLOCATION OF TEETH	Tincture of Iodine.	Counter Irritant.	Indicated both in cases of partial and total dislocation. After reduction, a splint is usually indicated.
	Solution of Iodine and Aconite Tincture.	Counter Irritant and Anodyne.	
	Capsicum Plaster.	Counter Irritant.	
DISLOCATION OF JAW	Rubefacient Liniments.	Counter Irritants.	Treatment by drugs is rarely necessary.

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
DEAD TOOTH	*vide* Root Canals, Septic.		
EMPYÆMA OF THE ANTRUM	*vide* Antrum.		
ENAMEL NODULES	Aromatic Sulphuric Acid.	Decalcifying agent.	This condition rarely calls for treatment.
	Tri-chlor Acetic Acid.	ditto.	
	Ammonium Bi-Fluoride.	ditto.	
EROSION	*vide* Abrasion.		
EXPOSURE OF PULP TRAUMATIC.	Solution of Boracic Acid, 1·40	Antiseptic.	To wash over the exposed surface.
	Eugenol, Thymol, or other mild antiseptic, with Zinc Oxide or Zinc Oxysulphate.	Antiseptic and Protective.	The slight irritating action of the mild antiseptic used stimulates the pulp to produce secondary dentine and form its own protective.
FERMENTATION ACID.	Alkaline Mouth Wash.	Ant-Acid.	Fermentation of carbo-hydrate food stuffs gives rise to acids in the mouth. Acids in the mouth may, however, also arise from (*a*) eructations from
	Milk of Magnesia.	Ant-Acid.	
	Cream of Tartar.	Sialagogue.	

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
FERMENTATION Acid (*contd.*)			the stomach, (*b*) altered secretion from the buccal mucous glands, (*c*) foods containing vegetable acids, (*d*) drugs containing either vegetable or mineral acids.
FOLLICULAR ODONTOME	*vide* Cysts.		
FOLLICULAR STOMATITIS	*vide* Stomatitis.		
FRACTURE OF JAW	Antiseptic Mouth Wash.	Antiseptic.	To clean the mouth before the application of bandages or splints, and whilst the latter are retained in the mouth.
FRACTURE OF TOOTH	*vide* Dentine, Hypersensitive. *vide* Periodonitis, Acute Local.		
GANGRENE of the Pulp.	*vide* Root Canals—Septic.		

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
GANGRENOUS STOMATITIS	*vide* Stomatitis.		
GINGIVITIS, (*a*) MARGINAL	Peroxide of Hydrogen.	Mechanical and Bactericide.	May be used as a swab, spray, or mouth-wash.
	Tannic Acid.	Astringent.	May be employed as a paint, mouth-wash, swab, or in powder form.
	Tincture of Iodine.	Counter-Irritant and Bactericide.	A stronger solution than the official Tincture is recommended, and may be made by mixing equal parts of the Tincture and Solution of Iodine.
	Solution of Silver Nitrate, 10 grs. to 1 oz.	Astringent.	When due to some specific infection, *e.g.*, Gonococcus.
	Chlorate of Potash.	Stimulant.	Used as a mouth-wash, swab, or tooth paste, its continued use should be avoided.
	Astringent Mouth Wash.	Astringent.	
	Solution of Acid Pheno-Sulphonic, 3%.	Antiseptic and Stimulant.	May be used as a swab, mouth wash or spray.
	Thyroid Extract.	Supplies insufficiency of the internal secretion of the gland.	Given in cases of mouth breathing due to adenoids in doses of three grains three times a day.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
GINGIVITIS (*contd.*)			
(*b*) Chronic Hypertrophic, General.	Solution of Alum, 10 grs. to 1 oz.	Astringent.	To be applied after removal of the hypertrophied tissue and subsequent scarification.
	Astringent and Antiseptic Mouth Washes generally.	Astringent and Antiseptic.	
(*c*) Chronic Hypertrophic, Local.	Potassa cum Calce.	Escharotic.	The part to be cleansed and dried before applying the escharotic, and the slough cut away when formed.
	Solution of Ethylate of Sodium.	Escharotic.	
(*d*) Chronic, General	Astringent Mouth Wash.	Astringent.	
(*e*) Chronic Atrophic	Glycerine of Borax. Glycerine of Boric Acid. Boracic Vaseline, 10%.	Mild Antiseptic, Stimulant and Emollient.	Both conditions would be more suitably classed under Stomatitis, as other mucous surfaces of the mouth are involved.
(*f*) Nudata	*vide* Chronic Atrophic.		

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
GLANDS, INFLAMMATION OF	LOCALLY.		
	Liniment of Iodide of Potassium with Soap.	Resolvent.	The lymphatic glands affected by the gums and teeth are :— (1) Submaxillary. (2) Sub-mental. (3) Parotid. (4) Superficial cervical. (5) Deep cervical.
	Glycerine of Belladonna.	Resolvent and Anodyne.	
	Linament of Belladonna.	Resolvent and Anodyne.	
	Tincture of Iodine.	Resolvent.	
	Hot Fomentations.	Emollient.	Inflammation may be either acute or chronic and associated with an acute or chronic septic condition in the mouth.
	INTERNALLY.		
	Mistura Alba.	Purgative.	
	Black Draught.	Purgative.	
GLOSSITIS (*a*) ACUTE SUPERFICIAL	Chlorate of Potash.	Stimulant.	To be used as a mouth wash.
	Astringent Mouth Wash.	Astringent.	

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
GLOSSITIS (*contd.*)			
(*b*) Chronic Superficial	Chlorate of Potash. Borax.	Stimulant. Alkaline antiseptic.	To be used as a mouth wash.
	Calomel.	Antiseptic and Stimulant.	The powder to be applied to the affected part.
	Antiseptic Mouth Wash. Peroxide of Hydrogen.	Antiseptic. Bactericide.	Chronic Superficial Glossitis being most frequently caused by a condition of oral sepsis, it is essential to procure a "clean mouth" as well as to treat the local lesion.
	Iodide of Potassium.	Alterative.	To be given internally, 5-10 grs. three times a day, particularly when due to syphilis.
(*c*) Acute Parenchymatous.	Borax, Boracic Acid.	Alkaline antiseptic.	May be applied in powder form, or used in solution, as a mouth wash.
	Calomel. Sulphate of Magnesia.	Purgative.	
GOUTY PERIODONTITIS	*vide* Periodontitis, Chronic General.		

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
GREEN STAIN on Teeth	Levigated Pumice Powder.	Abrasive.	It has been said that the green stain is due to the presence in the mouth of chromogenic bacteria. It should be borne in mind, however, that the majority of chromogenic bacteria found in the mouth produce their colouring matter only at a temperature much below that of the body, *viz.* 22°C
GUM, Bleeding of	Tannic Acid Powder.	Astringent and Styptic.	By this condition is meant the tendency of the gums to ready bleeding. As this is a sign of congestion and an early stage of what may eventually become a Chronic General Periodontitis, or Pyorrhœa Alveolaris, treatment must be consistently carried out.
	Astringent Mouth Wash.	Astringent.	
	Chlorate of Potash Tooth Paste.	Stimulant.	
	Soluble Tooth Pastes and Massage Creams.	Antiseptic. Astringent.	
	vide also Gingivitis—Marginal		

Affection or Disease.	Curative Agents—Drugs.	Action	Remarks.
GUM			
Hypertrophy Inflammation	*vide* Gingivitis.		
Laceration of	Antiseptic Mouth Wash. Peroxide of Hydrogen. Solution of Phenate of Potash.	Antiseptic. Bactericide. Antiseptic and Anodyne.	Care should be taken during the extraction of teeth, that injury to the gum should be as slight as possible. When the gum has been extensively lacerated, treatment must be prescribed.
Purpura Hæmorrhagica	Tannic Acid. Astringent Mouth Wash.	Styptic. Astringent.	Neither condition calls for treatment by the dental surgeon, but should be dealt with by a medical practitioner.
Scurvy, Effects of	Antiseptic Mouth Wash.	Antiseptic.	
Syphilitic manifestation	*vide* Syphilis.		

Affection or Disease.	Curative Agents—Drugs	Action.	Remarks.
HARE-LIP	Mild Antiseptic Mouth Wash of Borax or Boracic Acid.	Antiseptic.	To keep the mouth clean, owing to inability to feed properly.
HÆMOPHILIA	Calcium Chloride and Lactate.	Coagulant.	Supplies insufficiency of Calcium Salts to the blood, which are essential to clotting. Given internally in 10 gr. doses, three times a day.
	Adrenalin.	Vaso-Constrictor.	Injected hypodermically or given by the mouth.
	Ergotine.	Vaso-Constrictor.	
	Extract of Ergot—Liquid.	Vaso-Constrictor.	
	Gelatine.	Coagulant.	Injected hypodermically or applied locally.
	Normal Blood Serum. Normal Horse Serum.	Coagulant	Supplies insufficiency of fibrin ferment.
	Thyroid Extract.		May act by supplying a substitute for fibrin ferment.
	Ovarian Extract.		Has been given on account of women being exempt from Hæmophilia. Dose 5-20 grs.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks
HÆMORRHAGE After Dental Operations.	Astringent Mouth Wash.	Astringent.	In the case of a persistent primary hæmorrhage, bleeding can usually be arrested by giving an astringent mouth-wash, and lightly plugging the socket with cotton wool dipped in Tannic Acid. In cases of secondary, or intermediate hæmorrhage, more vigorous treatment must be resorted to, including local styptics, pressure, internal remedies, and possibly surgical methods.
	Tannic Acid.	Styptic.	
	Perchloride of Iron solution.	Styptic.	
	Styptol. Stypticine.	Styptic.	
	Adrenalin. Adrenalin Gauze.	Vaso-Constrictor.	
	Antiseptic Gauze Plugs.	Mechanical.	
	Hot Water.	Styptic.	
	Cold Water.	Styptic.	
	INTERNALLY.		
	Gallic Acid.	Hæmostatic.	Indicated when the blood shows no tendency to clot.
	Calcium Chloride or Lactate.	Coagulant.	
	Liquid Extract of Ergot.	Vaso-Constrictor.	Indicated when the blood shows a tendency to clot.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
HÆMORRHAGE (*contd.*)	HYPODERMICALLY. Injection of Ergotine.	Vaso-Constrictor.	Preparations of Ergot should not be given when large vessels are involved, as the muscular contraction would not be sufficient to close the vessels, and the increased arterial pressure caused by the drug would increase the bleeding. N.B.—Not to be given to pregnant women.
	Injection of Gelatine.	Coagulant.	10 grammes in 1,000 c.cs. 50 c.cs. for a dose, repeated if necessary.
	INTRAVENOUSLY. Normal Saline Solution.	Reinstates blood pressure.	Introduced into the median basilic vein in cases of severe collapse or subcutaneously in less urgent cases. *vide* Collapse.
HEART FAILURE	*vide* Syncope.		
HYPERÆMIA OF PULP	*vide* Pulpitis.		

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
HYSTERIA	Potassium, Sodium and Ammonium Bromides: Tonics *q.v.* Purgatives, *q.v.*	Nerve Sedatives.	Hysteria calls for general treatment, and attention to general health.
HYPERSENSITIVE CEMENTUM	Nitrate of Silver. Chloride of Zinc.	Caustic. Caustic.	On account of the black stain which follows the application of Silver Nitrate, it is preferable to use Chloride of Zinc for teeth in the front of the mouth.
HYPERSENSITIVE DENTINE	*vide* Dentine.		
HYPERSENSITIVE PALATE & FAUCES	Cocaine, its Salts and Analogues.	Anæsthetic.	Prior to taking impressions, a paint of a solution of one of the soluble salts, *e.g.* Coc. Hydrochlor, may be employed with beneficial results.
HYPER-TROPHY OF GUM	*vide* Gingivitis.		

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
HYPERTROPHY of Pulp	*vide* Pulp.		
INFLAMMATION of the			Inflammation arises from various causes, *e.g.*— Trauma, Chemical agents, Bacteria and their toxins. A recognition of the cause and its removal is therefore of primary importance.
(*a*) Buccal Mucous Membrane	*vide* Stomatitis.		
(*b*) Gum	*vide* Gingivitis.		
(*c*) Periodontal Membrane	*vide* Periodontitis.		
(*d*) Pulp	*vide* Pulpitis.		
(*e*) Tongue	*vide* Glossitis.		
JAWS, Dislocation of	*vide* Dislocation.		

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
JAWS, FORCED CLOSURE OF	*vide* Abscess—Acute. *vide* Hysteria. *vide* Joint—Diseases of. *vide* Strychnine—Poisoning. *vide* Tetanus.		The condition of forced closure which is usually presented to the dental surgeon is in connection with an acute abscess arising from an impacted third lower molar. The products of the inflammation infiltrate the tissues surrounding the joint, and impede its action.
JOINT, TEMPORO-MANDIBULAR			
ARTHRITIS (*a*) ACUTE	Tincture of Iodine.	Counter-Irritant.	General treatment according to cause.
	Tincture of Iodine and Aconite.	Counter-Irritant and Anodyne.	
	Rubefacient Liniment.	Rubefacient.	

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.	
JOINT TEMPORO-MANDIBULAR ARTHRITIS (*b*) DEFORMANS	Lithia Citrate.	Diuretic and solvent.	5-10 grs. 3 times a day.	This condition is so frequently associated with Pyorrhœa Alveolaris that a knowledge of some of the more usual internal remedies and their doses is advisable.
	Quinine Salicylate.	Antipyretic.	1-5 grs. 3 times a day. in cachets.	
	Salicin.	Antipyretic.	5-20 grs. 3 times a day.	
	Guaiacol and its Salts.	Antipyretic and Antiseptic.	Guaiacol, 1-5 min. 3 times a day, in capsule. Carbonate, 5-10 grs. 3 times a day, in cachet, increasing to 20 grs.	
	Aspirin.	Analgesic.	5-10 grs., when required, in cachet.	
	Thyroid Extract.	To supply insufficiency of thyroid secretion.	2-5 grs. 3 times a day in tablets.	
	External remedies as for (*a*) Acute (*contd.*)			

Affection or Disease.	Curative Agents—Drugs.	Action	Remarks.
ARTHRITIS DEFORMANS *(contd.)*	Vaccine. Phylacogen.	Produce active immunity.	The specific micro-organism isolated in Arthritis Deformans is the Strepto-bacillus Malæ (Goadby). It is claimed that 80% of the cases treated with Phylacogen have totally recovered.
LACTIC ACID IN THE MOUTH	*vide* Fermentation.		
LEAD POISONING (CHRONIC)	Alkaline Mouth Wash.	Ant-Acid.	The presence of a blue line on the gum is a diagnostic sign of chronic lead poisoning. The line is more pronounced in the lower incisor region, the presence of tartar on the teeth accentuating it. The line is absent wherever teeth are missing. Apart from rendering the mouth as aseptic as possible, the treatment lies outside the domain of the dental surgeon. N.B.—A blue line is also present in Copper and Bismuth poisoning—and may also be simulated by the introduction into the mouth, either accidentally, *(contd.)*
	INTERNALLY.		
	Sulphate of Magnesia.	Purgative.	
	Opium Pill.	Narcotic.	
	Potassium Iodide.	Alterative.	

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
LEAD POISONING (CHRONIC) (*contd.*)			incidentally to occupation, or intentionally as tooth powders, of charcoal, coal dust, soot, etc.
LEUKOPLAKIA	*vide* Stomatitis.		
LIPS, INJURY TO	Antiseptic Lotions. Vaseline. Boracic Vaseline, 10%. *vide* Burns and Hæmorrhage.	Antiseptic. Emollient. Antiseptic and Emollient.	The injuries, which may probably have to be treated, arise during the extraction of teeth, or by allowing some escharotic to come into contact with the lips.
LOCKJAW	*vide* Tetanus.		
LYMPHATIC GLANDS	*vide* Glands.		
LUDWIG'S ANGINA	Antiseptic Lotions. Antiseptic Gauze. Antistreptococcal Serum.	Antiseptic. Antiseptic. Produces passive immunity.	The condition of a diffuse cellulitis arising in connection with the mandibular teeth is very serious, and usually ends fatally. It is beyond the domain of a dental surgeon.

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
NECROSIS OF THE JAW	Hot Poppy Fomentations.	Emollient.	To be used in the early inflammatory stages after scarification.
	Antiseptic Mouth Wash.	Antiseptic.	To be used in all stages.
	Carbolic Acid Lotion 1/200.	Antiseptic.	To be used as an irrigation after connecting up existing sinuses, when the bone is necrosed, free drainage being ensured by means of the Antiseptic Gauze.
	Antiseptic Gauze.	Antiseptic.	
	Ionic Medication.	Germicide.	Has been recommended in the early stages.
	INTERNALLY.		
	Calomel.	Purgative.	In the early inflammatory stages.
	Sulphate of Magnesia.	Purgative.	In the early inflammatory stages.
	Potassium Iodide.	Alterative.	To be given in large doses in the early stages.
	Opium Pill.	Narcotic.	To be given when there is great pain.
			The general health must be supported by means of nutritious and stimulating foods.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
NEURALGIA	External.		
	Chloral and Camphor.	Anodyne.	The usual method of employing the various anodynes for the relief of facial neuralgia, is by mixing several together in proper proportions, and gently rubbing the resulting liniment on the painful part, and covering with cotton wool. Example: Menthol - grs. 30 Tincture of Aconite ʒiv Chloroform - ʒiv Ft. Liniment
	Aconite-Tincture or Liniment.	Anodyne.	
	Menthol.	Anodyne.	
	Salicylate of Methyl.	Anodyne.	
	Chloroform.	Anodyne.	
	Tincture and Solution of Iodine.	Counter Irritant.	
	Tincture of Capsicum.	Counter Irritant.	
	Tincture of Cantharides.	Counter Irritant.	
	Hypodermic Injections of		
	Alcohol.	Analgesic.	Five to ten minims are injected at several points in the course of the nerve, and also into the Gasserian ganglion, in Neuralgia Major.
	Solution of Osmic Acid 1·5%	Analgesic.	

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
NEURALGIA *(contd.)*	BY CATAPHORESIS.		
	Alcohol. Chloroform.	Anodyne.	The cotton tip of the positive electrode is saturated with a mixture of equal parts of Alcohol and Chloroform or even pure Chloroform, and placed over the affected part.
	INTERNALLY.		
	Citrate of Iron and Quinine.	Tonic.	When connected with general debility, overwork or anæmia. Phosphorous is best given in the form of a pill, dose, gr. 1/100.
	Phosphorous.	Tonic.	
	Tincture of Nux Vomica.	Tonic.	Nux Vomica, and Strychnine are given in small repeated doses.
	Solution of Strychnine.	Tonic.	
	Tincture of Aconite.	Sedative.	Recommended in the early stages. Weakens the action of the heart by stimulating the vagus centre and reduces temperature.
	Tincture of Gelsemium.	Sedative.	Depresses the nervous system.
	Bromide of Potassium.	Sedative.	Mixed with Citrate of Caffeine is said to be a specific.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
NEURALGIA (*contd.*)	Chloral Hydrate. Butyl Chloral Hydrate.	Hypnotic. Hypnotic.	The fifth nerve is said to be specially susceptible to Butyl Chloral Hydrate.
	Morphia, and its preparations.	Narcotic.	Only given in extreme cases.
	Iodide of Potassium.	Alterative.	Useful in cases associated with Rheumatism and Syphilis.
	Phenacetin. Antifebrin. Antipyrin. Pyramidon. Aspirin.	Anodyne.	Useful in cases of pheripheral origin. Frequently given in combination with Citrate of Caffeine, which counteracts the depressant effect usually obtained with drugs of this nature.
	Calomel. Sulphate of Magnesia.	Purgative. Purgative.	The general health of the patient must be attended to, and any specific cause treated.
NOMA	*vide* Stomatitis-Gangrenous.		
ODONTALGIA	*vide* Dentine Hypersensitive *vide* Pulpitis. *vide* Periodontitis.		

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
ORAL SEPSIS	Antiseptic Mouth Washes. *vide* Periodontitis. *vide* Gingivitis. *vide* Stomatitis.	Antiseptic.	Being the forerunner of many serious conditions—both local and general—should receive prompt and energetic treatment according to its etiology.
PAIN (*a*) After Extraction	Chloretone.	Anodyne.	In cases of pain arising from suppuration in the tooth socket, syringe out with antiseptic solution (*e.g.*, Acid Carbolic 1/40), and insert any one of these drugs, and plug with gauze. Orthoform is best used in the form of a paste made with liquid or solid Paraffin. Chloretone is also recommended to be used in a hot aqueous solution. Pure Carbolic Acid or Lysol are useful in cases when owing to incomplete extraction the remaining portion of the tooth contains an exposed pulp.
	Orthoform.	Anodyne.	
	Carbolic Acid.	Escharotic.	
	Lysol.	Escharotic.	
	Chloride of Zinc.	Escharotic.	
	Antiseptic Gauze.	Antiseptic.	
	Antiseptic Mouth Wash.	Antiseptic.	

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
(*b*) FROM ERUPTING TEETH	Ether.	Anodyne.	A mixture of the three drugs has been recommended, a suitable formula being: Menthol gr. v̄. Ether } āā ℥ii. Chloroform } Ft. Pigmentum.
	Chloroform.	Anodyne.	
	Menthol.	Anodyne.	
PERIODONTITIS (*a*) ACUTE, LOCAL	Tincture of Iodine.	Counter-Irritant.	If the inflammation is not caused by bacterial irritation, or bacterial infection does not supervene, the use of counter-irritants will frequently aid resolution.
	Solution of Iodine.	Counter-Irritant.	
	Tincture of Aconite.	Anodyne.	
	Capsicum Plaster.	Counter-Irritant.	
	Rubefacient Liniment. *vide* Abscess—Acute Alveolar.	Counter-Irritant.	A rubefacient liniment recommended has the following formula— Mentholis, grs. 20. Chloroformi, m. 30. Tinct. Aconiti, ʒ vi. M. Ft. Lin.
(*b*) ACUTE, GENERAL	Hot Fomentations.	Emollient.	This condition is frequently of so serious a nature as to require general treatment, according to the cause (*e.g.*, Iodide of Potassium in Syphilis).
	Antiseptic Mouth Wash.	Antiseptic.	
	Calomel.	Purgative.	
	Sulphate of Magnesia.	Purgative.	

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
PERIODONTITIS (*c*) CHRONIC LOCAL	Tincture of Iodine.	Counter Irritant.	*vide* Acute Local.
	Solution of Iodine.	Counter Irritant.	
	Tincture of Aconite.	Anodyne.	
	Capsicum Plaster.	Counter Irritant.	
	Peroxide of Hydrogen.	Germicide.	In cases arising at the gum margin.
	Trichlor-acetic Acid 25%.	Stimulant.	
	Nitrate of Silver.	Astringent.	
	Solution of Carbolic Acid.	Antiseptic.	After the operation of excision of the apex of a tooth, the cavity should be syringed out with Solution of Carbolic Acid 1-40, and packed with gauze.
	Antiseptic Gauze.	Antiseptic.	
PERIODONTITIS (*d*) CHRONIC GENERAL	Aromatic Sulphuric Acid.	Solvent.	To remove any remaining particles of calculus, which may be inaccessible, after thorough instrumentation.
	Ammonium Bi-fluoride.	Solvent.	
	Peroxide of Hydrogen.	Germicide.	
			To syringe out pockets, before subsequent treatment, and also as a mouth wash.
	Iodine, Tincture and Solution.	Germicide.	Painted on the gums, or introduced into the pockets.
	Copper Sulphate.	Germicide.	Introduced into the pockets in the form of powder or paste.
	(*contd.*)		

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
PERIODONTITIS CHRONIC, GENERAL (*contd.*)	Paramonochlorophenol.	Germicide.	Introduced into the pockets gives excellent results.
	Tri-Chloracetic Acid 15%.	Stimulant.	Syringed into the pockets.
	Balsam of Peru.	Antiseptic and Stimulant.	The pockets to be filled by means of a suitable syringe.
	Bismuth Paste.	Stimulant and Germicide.	Introduced into the pockets by means of a suitable syringe.
	Lactic Acid.	Stimulant.	Used as a paint on the gums, frequently in combination with Carbolic Acid.
	Chlorate of Potash.	Stimulant.	May be used as a mouth wash or in the form of a tooth-paste.
	Quinine Salts.	Stimulant and Antiseptic.	To be introduced into the pockets after previous injection of Aromatic Sulphuric Acid.
	Vaccine.	Produce active immunity.	Autogenous vaccines only should be used.
	Phylacogen.		Phylacogens differ from vaccines in that they contain no bacteria, but the products of metabolism, generated by bacteria, grown on culture media.
	(*contd.*)		

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
PERIODONTITIS Chronic General (*contd.*)	Antiseptic Mouth Wash.	Antiseptic.	To be prescribed for constant use.
	Pheno-Sulphonic Acid 3%.	Antiseptic.	
	Salicylate of Methyl.	Antiseptic.	To be used as a paint to the dried gums.
	Tannic Acid.	Astringent.	To be applied to the gums, in powder form, or in strong alcoholic solution.
	Astringent Mouth Wash.	Astringent.	To be prescribed for constant use.
	Massage.	Induces Hyperæmia.	There are several methods of obtaining an induced hyperæmia, and are valuable in that by this means excess of anti-bodies are brought into the infected area.
	Ionic Medication.	Germicide, and stimulant.	The chemicals usually employed are solutions of salts of Copper, Zinc, or Iodine, in strengths varying from 2 to 5%.
	Drugs for General Treatment.		These would include such remedies as saline mixtures and other purgatives, alteratives and diuretics, according to the concomitant symptoms.

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
PHOSPHOROUS NECROSIS	*vide* Necrosis.		
POISONING	*vide* Table of Poisons and Antidotes.		
POLYPUS OF GUM	*vide* Gingivitis. Chronic local Hypertrophy.		
POLYPUS OF PULP	*vide* Pulp, Hyperplasia of.		
PTYALISM	*vide* Stomatitis—Mercurial		
PULP DEVITALISATION OF	Arsenious Acid. Salts of Cobalt.	Escharotic. Escharotic.	Cobalt Salts are rarely to be obtained pure, and it is probable that their devitalising property is due to the Arsenic they contain as an impurity.
EXTIRPATION OF	Cocaine, its salts and analogues.	Anæsthetic.	Usually employed either by pressure or injection, and in combination with Adrenalin or synthetic substitutes for Adrenalin.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
PULP Putrescent	*vide* Root Canals—Septic.		
PULP, Hyperplasia of	Potassa cum Calce.	Escharotic.	The part should be clean and dry, and the slough cut away when formed.
	Carbolic Acid.	Anæsthetic.	May be applied previous to excision.
	Cocaine and its analogues.	Anæsthetic.	May be applied previous to excision.
PULPITIS (Acute)	Solution and Tincture of Iodine.	Counter-Irritant.	When due to trauma or injury by physical or chemical agents.
	Tincture of Aconite.	Anodyne.	
	Capsicum Plasters.	Counter-Irritant.	
	Bicarbonate of Soda.	Ant-Acid.	Pulpitis without exposure in carious teeth is generally caused by irritation due to acids the product of bacteria. The treatment indicated, therefore, is Ant-Acid, followed by Antiseptics, and lining the prepared cavity with a non-conducting and non-irritant antiseptic cement, prior to filling.
	Essential Oils.	Antiseptic.	
	Chloretone.	Anodyne.	
(Chronic)	*vide* Acute.		Removal of the pulp is usually necessary.

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
PYORRHŒA ALVEOLARIS	*vide* Periodontitis—Chronic General.		
PURPURA	Solution of Perchloride of Iron.	Styptic.	The treatment of this condition is beyond the domain of dental surgery.
	Astringent Lotions.	Astringent.	
	Liquid Extract of Ergot.	Vaso-Constrictor.	
RHINITIS	LOCAL APPLICATIONS.		
ACUTE	Alkaline Nasal Spray.	Ant-Acid.	A Rhinitis may be simple catarrhal or specific. Scarlet fever and influenza are the chief causes of the specific varieties. Owing to the possibility of the inflammatory condition, spreading to the antrum viâ the "ostium maxillare" it is of importance to the dental surgeon.
	Menthol Vaseline 4 grs. to 1 oz.	Emollient and Antiseptic.	
	INTERNALLY.		
	Calomel.	Purgative.	
	Sulphate of Magnesia.	Purgative.	
	Quinine Salts.	Tonic and Antipyretic.	
RIGG'S DISEASE	*vide* Periodontitis—Chronic General.		

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
ROOT CANALS Septic (*a*) Not complicated with Periodontitis	Peroxide of Hydrogen.	Germicide.	Used as a swab, or by means of a syringe.
	Solution of Perchloride of Mercury in Alcohol ·5%.	Germicide.	Should be used to wipe out the canals, with cotton wool twisted on a broach.
	Essential Oils.	Antiseptic.	Used as temporary dressings, and as ingredients of permanent root-filling preparations.
	Thymol.	Antiseptic.	
	Iodoform.	Antiseptic.	
	Sodium and Potassium.	Germicide.	The metals, in the proportions of 2 parts of Sodium and 1 part of Potassium, are introduced into the mechanically prepared root canals, by means of an iridio-platinum broach. The mixture forms a soap in combination with the fats of the pulp, and renders adherent albuminous substances soluble. Being powerfully escharotic great care must be observed during its application.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
ROOT CANALS Septic (*b*) Complicated with Periodontitis	Creosote.	Germicide.	The mixture of Cresol, with Formalin, known as Tri-Creso Formalin, is claimed to be a specific for putrescent pulp conditions. The strength of the mixture recommended is equal parts of Cresol (Tri-Cresol) and solution of Formaldehyde 40%.
	Cresol.	Germicide.	
	Formalin.	Germicide.	
	Tri-Creso Formalin.	Germicide.	
	Solution and Tincture of Iodine, and as for (*a*)	Counter Irritant.	
ROOT CANALS Twisted, &c.	Arsenious Acid.	Mummifying Agents.	This relates to a condition in which, by reason of twisted and tortuous roots, it is found to be impossible to remove the whole of the pulp from the root canals. The treatment may be practised also in cases where the condition of the patient renders it impossible or inexpedient to clear the root canals of the pulp. N.B.—Not to be used in putrescent pulp conditions.
	Alum.		
	Copper Sulphate.		
	Solution of Formaldehyde.		
	Tannic Acid.		
	Thymol.		
	(*vide* Formulæ).		

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
RICKETS	Hypophosphite of Calcium.	Tonic.	Usually prescribed in the form of a syrup.
	Hypophosphite of Iron.	Tonic.	
	Bone Medulla. Cod Liver Oil.	Tonic and Nutritive.	Attention to diet is essential, and sea air is to be recommended.
RHEUMATOID ARTHRITIS	*vide* Joint.		
SALIVARY FISTULA	Chromic Acid, pure.	Escharotic.	Care must be taken in using the pure acid. It will be found convenient to fuse it on to a suitable probe.
SALIVATION	*vide* Stomatitis—Mercurial		
SEPSIS—ORAL	*vide* Oral Sepsis.		

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
SCURVY	INTERNAL.		
	Calomel.	Purgative.	Scurvy produces in the mouth a characteristic spongy condition of the gums, which bleed readily.
	Sulphate of Magnesia.	Purgative.	
	Strychnine.	Tonic.	
	Citrate of Iron and Quinine.	Tonic.	Purgatives should be given in the early stages and tonics during convalescence.
	Arsenic.	Alterative.	
	Lemon Juice.	Specific.	
	LOCAL APPLICATION.		
	Astringent Mouth Wash.	Astringent.	
SHOCK After Tooth Extraction	Sal Volatile.	Cardiac Stimulant.	Given by the mouth, one teaspoonful diluted with water.
	Strychnine.	Cardiac Stimulant.	Most conveniently given hypodermically as Solution of Strychnine. The dose is from 5-10 mins., but in cases of severe shock as much as 20 mins. can be given. It may also be administered by the mouth.

(*contd.*)

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
SHOCK After Tooth Extraction (*contd.*)	Atropine.	Cardiac Stimulant.	Injected hypodermically. Dose, gr. 1/60 to 1/50. The addition of 1/150 grain to an injection of Solution of Strychnine is said to increase its effectiveness.
	Ether.	Cardiac Stimulant.	May be injected hypodermically in large doses. (*vide* Syncope).
	Adrenalin.	Cardiac Stimulant and Vaso-Constrictor.	Best given intravenously, 1 in 40,000 of Normal Saline Solution, 1 in 20,000 may be infused at the rate of 3 to 5 c.cs. per minute, if the patient remains in a dangerous condition.
	Pituitary Extract.	Cardiac Stimulant and Vaso-Constrictor.	2-4 grains may be given by the mouth, or 1 c.c. injected intramuscularly. It may also be given intravenously in Normal Saline Solution. Elevates systemic arterial pressure by virtue of its peripheral constriction, and simultaneously lowers the pressure in the pulmonary circuit.
	Normal Saline Solution.	*vide* Collapse.	In cases of shock the patient must be kept in a recumbent position and warmth applied to the extremities.

AFFECTION OR DISEASE	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
STOMATITIS (*a*) APHTHOUS	Chlorate of Potash.	Stimulant.	May be applied in powder form or used as a mouth wash. Care must always be observed in prescribing Chlorate of Potash, externally or internally, on account of its destructive action on red blood corpuscles on entering the blood stream.
	Boracic Acid.	Antiseptic.	As a mouth wash.
	Nitrate of Silver.	Caustic.	To be applied if the condition is persistent. This condition is usually found in children from 6 to 18 months—rarely in adults. In cattle as " Foot and Mouth Disease."
(*b*) CATARRHAL	Astringent Mouth Wash.	Astringent.	Frequently given in combination with Chlorate of Potash.
	Chlorate of Potash.	Stimulant.	Applied locally, also given internally.
	Boracic Acid.	Antiseptic.	A saturated solution may be given as a mouth wash or may be applied locally in powder form for an adult, 1 part to 8 parts of water, as a mouth wash.

(*contd.*)

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
STOMATITIS CATARRHAL (*contd.*)	Peroxide of Hydrogen, 20 vols.	Bactericide.	As a swab or a mouth wash. This condition is frequently found in children during the first dentition, and in exanthematous fevers and gastro-intestinal disturbances. In adults it may be caused by the excessive use of tobacco, spirits, condiments, etc. Chlorate of Potash in combination with Tinct. Ferri Perchlor. is useful given internally, but with caution to children and to patients suffering from kidney disorders.
(*c*) FOLLICULAR	Astringent Mouth Wash. Silver Nitrate.	Astringent. Caustic.	This condition is usually found in children, accompanying gastro-intestinal disturbances, for which general treatment is necessary.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
STOMATITIS (*d*) Gangrenous	Antiseptic Mouth Washes.	Antiseptic.	Before applying the escharotic, the part should be thoroughly cleansed with an antiseptic lotion and carefully dried.
	Solution of Sulphate of Zinc, 1%.	Astringent and Antiseptic.	
	Nitric Acid, pure.	Escharotic.	
	Actual Cautery.	Escharotic.	This condition is found in young, weakly children, existing in unhealthy surroundings.
	Antiseptic Gauze.	Antiseptic.	
			The prognosis is grave and the health of the patient must be supported by stimulating and nutritious foods.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
STOMATITIS (*e*) MERCURIAL	Antiseptic mouth wash.	Antiseptic.	
	Alum Swab.	Astringent.	
	Chlorate of Potash.	Stimulant.	As a mouth wash. Also given internally.
	Atropine.	Checks excessive secretion.	By paralysing the peripheral nerve fibrils, which supply the secretory cells of the glands. Dose internally, gr. 1/100.
	Opium.	Narcotic.	Only to be given in extremely painful cases.
	Sulphate of Magnesia.	Purgative.	Any saline aperient may be given. Where the condition is due to overdosing, or too prolonged treatment with mercury, the mercurial treatment must be stopped. During mercurial treatment the mouth must be kept clean, as a dirty mouth, owing to the formation of H_2S, tends to ptyalism.

AFFECTION OR DISEASE.	CURATIVE AGENTS—DRUGS.	ACTION.	REMARKS.
STOMATITIS (*f*) NEUROTIC	Tincture of Iodine. Cocaine.	Counter-Irritant. Anæsthetic.	This condition arises in individuals suffering from mental worries. Rest and removal of worries is an essential part of the treatment.
	Opium.	Narcotic.	Cocaine and opium are only given in cases of severe pain.
(*g*) PARASITIC	Solution of Borax.	Antiseptic.	This condition is found in young children, and occasionally in old people.
(1) Saccharomyces Albicans.	Glycerine of Borax.	Antiseptic and Demulcent.	
THRUSH.	Honey of Borax.	Antiseptic and Demulcent.	In children the infection may frequently be traced to dirty feeding bottles.
	Solution of Bicarbonate of Soda.	Ant-Acid.	As a mouth wash in 5-10% solution.
	Syrup of Rhubarb.	Purgative.	
(2) ASPERGILLUS NIGRESCENS.	Etherial Solution of Pyrozone.	Germicide.	The strength of the solution used in 25%. Pyrozone is a concentrated stable peroxide of hydrogen.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
STOMATITIS (*h*) Ulcerative	Peroxide of Hydrogen mouth wash.	Germicide.	One part of $H_2 O_2$, 20 vols, to 10 parts of water.
	Chlorate of Potash mouth wash.	Stimulant.	*vide* Formulæ.
	Copper Sulphate.	Escharotic.	To be applied with care to the ulcer.
	Zinc Sulphate.	Astringent and Antiseptic.	Most conveniently applied as a 1% solution.
	Carbolic Oil.	Disinfectant.	Applied by means of a wool swab.
	INTERNALLY.		
	Tincture of Perchloride of Iron.	Tonic.	Usually combined in the form of a mixture for internal administration. *vide* Formulæ.
	Chlorate of Potash.	Specific.	
	Calomel.	Purgative.	This condition is usually seen in children who are exposed to unhealthy surroundings, and who have been badly nurtured. Tonics and a nutritious diet, with fresh air, are therefore necessary on recovery from the attack.
	White mixture.	Purgative.	

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
SUPPURATION In Tooth Socket after Extraction	Solution of Perchloride of Mercury 1-1000.	Antiseptic.	The socket to be well irrigated with one or other of the Antiseptic lotions.
	Solution of Carbolic Acid 1-40.	Antiseptic.	
	Chloride of Zinc. Lysol.	Escharotic and Germicide.	The Chloride of Zinc to be used pure, and a small piece to be placed in the irrigated socket. Lysol should be placed pure in the socket on a piece of wool.
	Antiseptic mouth wash.	Antiseptic.	To be prescribed for regular use, and also to wash out the socket subsequent to above treatment.
	Antiseptic Gauze.	Antiseptic.	To plug the socket when necessary, to prevent the accumulation of debris.
SYNCOPE	Sal Volatile.	Cardiac Stimulant.	Stimulates both the heart, and its accelerator nerves. Its action is transitory.
	Brandy.	Cardiac Stimulant.	Not a true stimulant, probably acts by improving the distribution of blood.
	Ether.	Cardiac Stimulant.	Injected in large doses. Stimulates the heart and raises the blood pressure by its action on the vaso-motor centres.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.	
SYPHILIS Manifestations in mouth	Boric Acid Powder.	Antiseptic.	To be used in the powder form.	It frequently happens that Syphilis comes to the notice of the dental surgeon before a general practitioner has been consulted. Care must therefore be taken to diagnose such condition, and general treatment emphatically advised.
(*a*) Primary Ulcer	Solution of Perchloride of Mercury 1-2000.	Antiseptic.	To be used as a mouth wash.	
	Chlorate of Potash.	Stimulant.		
(*b*) Mucous Tubercles	Silver Nitrate.	Escharotic.	To be applied pure to the part.	
	Copper Sulphate.	Escharotic.		
	Solution of Chromic Acid 20%.	Escharotic.		
(*c*) Tertiary Ulcer	As (*a*) and (*b*).		General treatment—which lies outside the domain of dental surgery—consists of the administration of such drugs as Mercury and Iodide of Potassium by the mouth, or preparation of Arsenic as Salvarsan (606) by intravenous, intramuscular, or subcutaneous injection.	
TARTAR	*vide* Calculus.			

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
TEETHING OF INFANTS	For local pathological conditions, *vide* Stomatitis.		
TETANUS	Anti-Tetanic Serum.	Antitoxic.	Hypodermic or intravenous injections.
	Bromide of Potassium.	Nerve Sedative.	By the mouth or rectum.
	Chloral Hydrate.	Nerve Sedative.	
TONGUE—ULCERS OF			
(*a*) DENTAL	Silver Nitrate.	Escharotic.	It is found from statistics that in carcinoma of the tongue there invariably exists a chronic condition of oral sepsis. Many cases believed to be carcinomatous have cleared up after vigorous remedial and surgical treatment of the oral sepsis.
(*b*) DYSPEPTIC	Copper Sulphate.	Escharotic.	
(*c*) SYPHILITIC (*vide* Syphilis)	Chlorate of Potash Mouth Wash.	Stimulant.	
(*d*) MALIGNANT	Antiseptic Mouth Wash.	Antiseptic.	A persistent dental ulcer—due to trauma—in a septic mouth may become malignant, therefore both the traumatic cause and the oral sepsis must be removed.
	Astringent Mouth Wash.	Astringent.	Dyspeptic ulcers yield readily to internal treatment of the dyspepsia.

Affection or Disease.	Curative Agents—Drugs.	Action.	Remarks.
TONGUE—WOUNDING During Extraction	Antiseptic Mouth Wash. *vide* Hæmorrhage.	Antiseptic.	This condition can always be avoided if due care is taken whilst operating. Should it, however, occur, treatment must be given and prescribed.
TOOTHACHE	*vide* Odontalgia.		
THRUSH	*vide* Stomatitis—Parasitic.		
VOMITING Post Anæsthetic	Glucose. Bromide of Potassium.	Checks Acidosis. Sedative.	Post anæsthetic vomiting may be avoided by giving either of the remedies previous to the anæsthetic.
WOUNDS	Antiseptic Lotions Antiseptic Gauzes. Collodion Flexile. *vide* Hæmorrhage.	Antiseptic. Antiseptic. Protective.	

CLASSIFICATION AND DEFINITION OF REMEDIES.

CLASSIFICATION AND DEFINITION OF REMEDIES.

TABLE A.

Name.	Derivation.	Definition.	Modes of Action and Remarks.	Examples.
ANÆSTHETIC	Gr- An=without Gr. Aisthesis=sensation	An agent which produces insensibility or loss of sensation.	(1) Local (a) Benumbs the part by the cold it produces.	Ethyl Chloride.
			(b) Paralyses peripheral sensory nerves.	Cocaine.
			(2) General—Acts on and inhibits nerve centres in the brain.	Nitrous Oxide.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
ANALGESIC	Gr. An = without Gr. Algos = pain	An agent which induces an absence of sensibility to pain.	(1) Direct depressant action on nerve centres, of sensation and perception.	Antipyrin.
			(2) Impair conductivity of nerve fibres.	Silver Nitrate.
ANODYNE	Gr. An = without Gr. Odune = pain	An agent which produces relief from pain (presupposing the presence of pain).	(3) Inhibit nerve centres in the brain.	Nitrous Oxide.
			(4) Applied externally, first stimulate sensory nerve endings, then paralyse them, producing tingling, numbness and local analgesia.	Aconite.
			(5) *cf.* Hypnotics and Narcotics.	Opium.
ANTACID	Gr. Anti = opposing E. Acid	An agent which neutralises excessive acidity due to the results of morbid processes.		Bicarbonate of Soda.

Name	Derivation.	Definition.	Modes of Action and Remarks.	Examples.
ANTIPHLOGISTIC	Gr. Anti=opposing Gr. Phlogizein =to set on fire	An agent which prevents or retards the progress of inflammatory processes.	Contra - indicated where the vitality of tissue is impaired by previous diseased conditions.	Aconite.
ANTIPYRETIC	Gr. Anti=opposing Gr. Paretos=feverish	An agent which reduces body temperature.	(1) Lessen heat production.	
			Reduce the circulation and diminish tissue change.	Quinine.
			(2) Promote heat loss.	
			(*a*) Dilate arterioles and promote perspiration.	Spirit of Nitrous Ether
			(*b*) Abstract heat from the body.	Wet Pack.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
ANTISEPTIC	Gr. Anti = opposing Gr. Septikos = putrefactive	An agent which prevents or retards decomposition by (1) arresting development of bacteria that produce it, or (2) rendering inocuous the toxic products of their metabolism, or retarding or hindering the absorption of such products.	N.B. — Antiseptics, strictly speaking, need not necessarily have the power of destroying micro-organisms. *cf.* Germicides.	(1) Carbolic Acid. (2) Iodoform.
ALTERATIVE	L. Alterans = changing	An agent which changes and corrects morbid conditions and increases metabolism.		Iodide of Potassium.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
ANTI-TOXIN	G. Anti = opposing Toxicon = poison	An agent which, when injected into a human subject increases the number of anti-bodies in the blood. These anti-bodies or "receptors" unite with the toxins present, and bring about a condition of acquired passive immunity.	An Antitoxic Serum is serum obtained, and standarised, under aseptic conditions, from an animal (*e.g.*, horse) which has been rendered actively immune against a specific bacterium or its toxic products. (*cf.* Vaccine).	Anti-Diphtheritic Serum.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
ASTRINGENT	L. ad = to. Stringere = to bind	An agent which contracts and condenses tissue and lessens secretion from mucous surfaces.	(1) By coagulation or precipitation of albumin and gelatine.	Tannic Acid.
			(2) By making tissues more dense by concentration.	Alum.
			(3) By direct action on secreting cells.	Chloride of Zinc.
			(4) Remotely, by acting on internal organs through the blood.	Gallic Acid.
			Astringents generally possess irritant properties. Three of them are, however, markedly sedative, and may therefore be applied to acute inflammatory areas.	Silver Nitrate, Acetate or Sub-acetate of Lead. Subcarbonate or Subnitrate of Bismuth.
CARDIANT	G. Kardia = heart	An agent which affects the action of the heart.	Varieties:—	
			(1) Sedatives:—Lower arterial pressure.	Aconite.
			(2) Stimulants:—Increase arterial pressure.	Ammonia.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
CATHARTIC	G. Kathartikos =cleansing	*vide* Purgative.		
CAUSTIC	G. Kaustikos =burning	*vide* Escharotic.		
CAUTERY	G. Kauterion =a branding iron	A term formerly applied to caustics, but more recently to the platinum wire, heated by an electric current.	Degrees of heat. (*a*) Bright red to a white heat, as a counter-irritant, and for the destruction of tissue. (*b*) Not exceeding a dull cherry red colour as a hæmostatic.	Paquelin's Cautery.
CHOLAGOGUE	G. Cholos = bile Agogos = a leader	An agent which stimulates the flow of bile and produces free purgation at the same time.	(*a*) Indirectly, by stimulating the duodenum and upper part of the jejunum. (*b*) Directly, by acting on the liver cells.	Calomel. Podophyllin.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
COUNTER-IRRITANT	L. Contra = against Irritans = exciting	An agent which relieves pain, reduces inflammation, or accelerates absorption at a spot remote from the disordered area but having nervous or vascular communication with it—relief being occasioned by reflex nervous action.	Varieties :— (1) Rubefacients—produce local hyperæmia. (2) Epispastics — produce a blister. (3) Escharotics—destroy tissue.	Iodine. Cantharides. Chromic Acid.
DECALCIFYING AGENT	L. De = removal Calce = lime Facere = to make	An agent which by chemical interaction removes calcific salts from a hard tissue.	*cf.* Histological Tables.	Aromatic Sulphuric Acid.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
DEMULCENT	L. De=removal Mulcere = to stroke	An agent which protects and allays irritation of the mucous membranes.	*cf.* Emollients, between which and demulcents no hard and fast distinction can be made.	Olive Oil.
DIAPHORETIC	G. Dia = through Phoreein = to carry	An agent which produces free perspiration.	(1) Stimulate the sweat glands by acting on centres. (2) Dilate the superficial capillaries. (3) As (2) and increase body temperature.	Pilocarpine. Dover's Powder. Turkish Bath.
DISINFECTANT BACTERICIDE GERMICIDE	L. Dis=reversing In=into Facere = to make	An agent which renders free from infection by destroying putrefactive and other micro-organisms (and spores) and the products of their metabolism.	(1) By absorbing the products of putrefaction. (2) By taking up water. (3) By taking up Hydrogen from water and liberating Oxygen. (4) By giving out Oxygen directly. (5) By withdrawing Oxygen. (6) By directly acting on bacteria. *cf.* Antiseptics.	Charcoal. Quicklime. Chlorine. Peroxide of Hydrogen. SO_2. Perchloride of Mercury. Lysol.

Name.	Derivation.	Definition.	Modes of Action and Remarks.	Examples.
DIURETIC	G. Dia = through Ouron = urine	An agent which produces an increased flow of urine.	(1) Stimulates renal epithelium. (2) Increases blood pressure. (3) Forms compounds readily eliminated.	Caffeine. Digitalis. Vegetable Salts of Potash.
EMETIC	G. Emesis = vomiting	An agent which produces vomiting.	(1) Reflex :—Irritates the nerve end organs of the pharyngeal, œsophageal or gastric nerves.	Copper Sulphate.
			(2) Direct :—Through the circulation and thus stimulating the vomiting centre in the medulla.	Apomorphine.
EMMENAGOGUE	G. En = in Men = Month Agogein = to lead	An agent which restores menstrual function.	(1) Indirectly—by tonic action on the general system.	Iron Salts.
			(2) Directly—by local stimulation. N.B.—Ergot in large doses produces labour. *cf.* Use in Hæmorrhage.	Ergot.
EMOLLIENT	L. E. = out Mollis = soft	An agent which softens and relaxes the tissues.	*cf.* Demulcents.	Glycerine.

Name.	Derivation.	Definition.	Modes of Action and Remarks.	Examples.
ESCHAROTIC	G. Eschara = fireplace	An agent which disorganises or destroys living tissue.	(1) Abstract water from the tissue.	Arsenious Acid.
			(2) Combine with the albumin in the tissue.	Silver Nitrate.
			(3) By corrosive action.	Chromic Acid.
HÆMOSTATICS	G. Hæmia = blood Statikos = causing to stand still	An agent which arrests the flow of blood.	(1) Pressure.	Plugs, ligatures.
			(2) By astringent action.	Gallic Acid.
			(3) By constricting the arterioles.	Adrenalin.
			(4) By increasing the coagulability of the blood by introducing into it a deficiency.	Calcium Lactate.
HYPNOTIC	G. Hupnos = sleep Osis = state of	An agent which produces sleep.	Hypnotics are given where the insomnia is purely functional and not due to pain. *cf.* Narcotics.	Chloral Hydrate.
NARCOTICS (Hypno-Narcotics)	G. Narkoein = to benumb	An agent which relieves pain and produces sleep.	*cf.* Hypnotics.	Opium.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
NERVOUS SEDATIVE	L. Sedare = to appease	An agent which reduces the functional activity of the nerves.		Bromide of Potassium.
NERVOUS STIMULANT	L. Stimulus = a goad	An agent which increases the functional activity of the nerves.	In large doses causes exhaustion, and acts as sedative.	Caffeine.
			VARIETIES.	
PURGATIVE	L. Purgare = to empty	An agent which produces evacuation from the bowels.	(1) *Laxatives*: — Non irritating and produce slight peristaltic action.	Cascara.
			(2) *Cathartics*: — Produce a decided positive action, with some irritation and griping.	Sulphate of Magnesia.
			(3) *Drastics*: — Produce violent action, with griping and much irritation.	Croton Oil.
RUBEFACIENT	L. ruber = red Facere = to make	An agent which produces redness of the skin.	*cf.* Counter-irritants.	Capsicum.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
REVULSIVE	L. Re=back Vulsis=a plucking	An agent which causes withdrawal of blood from a congested area to a remote area.	For this reason purgatives are prescribed in cases of acute alveolar abscess, &c. *cf.* Counter-irritants.	Black Draught.
SIALAGOGUE	G. Sialon= Saliva Agogos = A leader	An agent which produces an increased flow of saliva.	By increasing the flow of saliva, which has a marked alkaline reaction, certain sialagogues may be employed as antacids.	Cream of Tartar.
SPECIFIC	E. Species L. Facere=to make	An agent which has a direct curative action on certain "specific" diseases.	Little is known at present, as to the mode of action of "specifics."	Chlorate of Potash.
STYPTIC	G. Stuphein—to constrict	An agent which constricts blood vessels and arrests hæmorrhage.	*cf.* Astringents — Styptics are markedly astringent. *cf.* Hæmostatics — Styptics are described as local hæmostatics.	Tannic Acid.

Name.	Derivation.	Definition.	Modes of Action and Remarks.	Examples.
TONIC	E. Tone G. Tonos=to stretch	An agent which promotes activity of the various organs, and gives "tone" to the general system. By "tone" is meant a condition or state habitual to healthy muscular and other tissues intermediate between complete relaxation, and the contraction produced in doing work. Hence a state of normal vigour of any part.	Varieties. Stomachic Digestive Intestinal } Increase the tone of the stomach and intestines.	Cinchona.
			Hæmatic, increase the tone of the blood.	Iron Salts.
			Vascular, increase the tone of the blood vessels.	Ergot.
			Cardiac, increase the tone of the heart.	Strychnine.
			Nervine, increase the tone of the nerves.	Phosphorous.
			General, increase the tone of the whole system.	Fresh Air.

NAME.	DERIVATION.	DEFINITION.	MODES OF ACTION AND REMARKS.	EXAMPLES.
VACCINE	L. Vacca = a cow	A standardised sterile emulsion of killed bacteria, which when injected into the human subject, produces a condition of active immunity.	VARIETIES. (1) *Stock* :—Prepared from a subject other than the one under treatment. (2) *Autogenous* :—Prepared from the subject under treatment. (3) *Pure* :—An emulsion of one variety of bacterium only. (4) *Mixed* :—An emulsion of more than one variety of bacterium.	Vaccines for Pyorrhœa Alveolaris and its sequelæ.
VASO-MOTOR AGENT	L. Vas = a vessel Motio = I move	An agent which influences the movements of the walls of the blood vessels.	VARIETIES. (1) *Dilators* :—Which dilate the blood vessels. (2) *Constrictors* : — Which constrict the blood vessels.	Amyl Nitrite. Adrenaline

CLASSIFICATION OF DRUGS AND REMEDIES.

TABLE B.

Not exhaustive nor arbitrary, but those mainly in use in Dental Practice.

ALTERATIVES.

Iodide of Potassium
Salts of Iron
Salts of Mercury

ANÆSTHETICS.

(1) *Local.*

(*a*)

Ethyl Chloride

(*b*)

Alypin
Cocaine
Cocaine Hydrochloride
Cocaine Lactate
Eucaine and salts
Novocaine
Essential Oils
Carbolic Acid
Creosote

(2) *General.*

Nitrous Oxide Gas
Chloroform
Ether
Ethyl Chloride

ANT-ACIDS.

Bi-Carbonate of Soda
Carbonates of
  Calcium
  Lithia
  Magnesia
  Potash
  Soda
Milk of Magnesia

ANTIPHLOGISTICS.

Aconite
Mercury
Opium
Gelsemium

ANALGESICS, ANODYNES.

Aconite
Antifebrin
Antipyrin
Camphor Chloral
Carbolic Acid
Essential Oils
Menthol
Phenacetin
Pyramidon
Silver Nitrate

ANTIPYRETICS.

Lessen heat production

- Aconite
- Antifebrin
- Antipyrin
- Aspirin
- Digitalis
- Guaiacol
- Quinine
- Salicin
- Salol

Promote heat loss

- Spirit of Nitrous Ether
- Cold Water
- Wet Pack

ANTISEPTICS.

- Alcohol
- Benzoic Acid
- Borax
- Boric Acid
- Carbolic Acid
- Chinosol
- Creosote
- Cresol
- Di-Iodoform
- Essential Oils
- Eucalyptol
- Iodine, Iodides
- Iodoform
- Lysol
- Menthol
- Mercury, Salts of
- Methyl Salicylate
- Paraform
- Paramonochlorphenol
- Permanganate of Potash
- Peroxide of Hydrogen
- Salol

ASTRINGENTS.

- Alum
- Bismuth, Salts of
- Copper Sulphate
- Gallic Acid
- Iron, Perchloride of
- Lead Acetate
- Lead Sub-Acetate
- Myrrh, Tincture of
- Rhatany, Tincture of
- Silver Nitrate
- Tannic Acid
- Trichloracetic Acid
- Zinc Chloride
- Zinc Sulphate

CARDIANTS.

SEDATIVES.

- Aconite
- Hydrocyanic Acid

STIMULANTS.

- Alcohol
- Ammonia
- Amyl Nitrite
- Caffeine Citrate
- Digitalis

CARDIANTS—*continued*.

Ether
Strophanthus
Strychnine

COUNTER-IRRITANTS.

RUBEFACIENTS.

Capsicum
Chloroform
Eucalyptol
Iodine
Menthol
Turpentine

EPISPASTICS.

Acetic Acid, Glacial
Ammonia
Cantharides

ESCHAROTICS.

Arsenic
Carbolic Acid
Cautery
Chloride of Zinc
Chromic Acid
Nitric Acid
Potassa cum Calce
Silver Nitrate
Trichloracetic Acid

CHOLAGOGUES.

Aloes
Calomel
Podophyllin

DECALCIFYING AGENTS.

Ammonium Bifluoride
Hydrochloric Acid
Lactic Acid
Nitric Acid
Sulphuric Acid
Trichloracetic Acid

DEMULCENTS and EMOLLIENTS.

Borax and Honey
Cold Cream
Glycerine
Hot Fomentations
Olive Oil
Poultices
White of Egg

DIAPHORETICS.

Ipecacuanha
Pilocarpine
Salicylates
Spirit of Nitrous Ether
Turkish Bath

DISINFECTANTS.

Carbolic Acid
Chloride of Zinc
Chlorine
Cresol
Formaldehyde
Heat
Lysol

DISINFECTANTS—*continued*.

Mercury, Salts of
Paraform
Paramonochlorphenol
Sunlight

DIURETICS.

Caffeine
Lithia, Salts of
Potash, Salts of

EMETICS.

Direct.

Apomorphine Hydrochloride
Ipecacuanha

Indirect.

Alum
Copper Sulphate
Mustard
Salt
Zinc Sulphate

HÆMOSTATICS.

(*See* ASTRINGENTS).

Adrenaline
Calcium Chloride
Calcium Lactate
Cold
Ergot
Gallic Acid
Heat

HYPNOTICS.

Bromides
Chloral Hydrate
Chloralamide
Chloretone
Sulphonal
Trional
Veronal

NARCOTICS.

Chloral Hydrate
Codeine
Morphia
Opium

NERVE

(*a*) SEDATIVES.

Antifebrin
Antipyrin
Belladonna
Bromides
Butyl Chloral Hydrate
Camphor
Chloral Hydrate
Gelsemium
Opium
Phenacetin

(*b*) STIMULANTS.

Caffeine
Coca
Strychnine

PURGATIVES.

Aloes
Calomel
Castor Oil
Croton Oil
Jalap
Magnesium Sulphate
Podophyllin
Rhubarb
Senna
Sodium Sulphate

SIALOGOGUES.

Cream of Tartar
Mercury, Salts of
Pilocarpine

TONICS.

Acids, dilute mineral
Arsenic
Cinchona
Digitalis
Gentian
Iron, Salts of
Nux Vomica
Phosphorous
Quinine
Strychnine

VASO-MOTOR

DILATORS.

Aconite
Amyl Nitrite
Nitroglycerine

CONSTRICTORS.

Adrenaline
Digitalis
Ergot
Strychnine

PART III.

PRESCRIBING

INCLUDING INSTRUCTIONS ON, HOW TO WRITE A PRESCRIPTION, AND SOME TYPICAL FORMULÆ.

PRESCRIBING.

(1) Prescription Writing.
(2) Weights and Measures.
(3) Doses.
(4) Solubilities.
(5) Incompatibles.
(6) Poisons and Antidotes.

PRESCRIPTION WRITING.

By a prescription (pre—before, scribo—I write) is meant the written directions for the preparation and use of remedies.

The various parts of a prescription are :—

(*a*) The Heading or Sign.
(*b*) The Ingredients, and quantities.
(*c*) The Directions to the Pharmacist.
(*d*) The Directions to the Patient.
(*e*) The Signature of the Prescriber.
(*f*) The Name of the Patient.
(*g*) The Date.

EXAMPLE.

(*f*) Name of the Patient	Mrs. Brown.
(*a*) Heading or Sign	℞*.
(*b*) Ingredients, and quantities	Magnesii Sulphatis ... ... ʒvi Magnesii Carbonatis Ponderosæ ʒi Aquæ Menthæ Piperitæ ad ... ℥vi
(*c*) Directions to the Pharmacist... ...	Misce fiat Mistura et signetur.
(*d*) Directions to the Patient	A sixth part to be taken twice daily before meals.
(*g*) Date	*Dec. 31, 1913.*
(*e*) Signature of Prescriber	W. A. B.

Points to be borne in mind when writing a prescription :—

(1) Writing to be clear and legible.

(2) No ambiguous abbreviations must be used or errors may result.

EXAMPLE. Hyd. Chlor. may mean :

Perchloride of Mercury.
Subchloride of Mercury.
Chloral Hydrate.

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* ℞ is a modification of the ancient ♃, being an invocation to Jupiter. It is now understood to be the first letter of the Latin word Recipe= Take thou.

(3) It is preferable to designate ingredients by their Latin names which are understood throughout the civilised world.

(4) The Latin names of ingredients are in the Genitive case, the quantities in the Accusative (governed by ℞), but it is not usual to write these in full.

EXAMPLE.

Recipe Magnésii Sulphatis drachmas sex.
Take (of) Sulphate of Magnesia six drachms.
R. Mag: Sulph: ʒvi
cf. Materia Medica Index—Synonym.

(5) Directions to the Pharmacist should be written in Latin.

EXAMPLE.

Misce fiat Mistura, et signetur.
Mix, let a mixture be made and let it be labelled.

(6) Directions to the patient are preferably written in English, and should be both clear and concise.

(7) It is usual to sign one's initials only to a prescription, except when prescribing for a member of a royal family, when it is etiquette to sign the name in full.

AN ABRIDGED LIST OF WORDS AND TERMS.

WITH THEIR ENGLISH MEANINGS,

used in prescription writing, together with their usual forms of abbreviation.

āā, ana	of each (ingredient)
ad	to or up to
adde	add thou
ante	before
aq., aqua	water
aq. dest., aqua destillata	distilled water
aq. ferv., aqua fervens	hot water
aq. font., aqua fontana	spring water
aq. gel., aqua gelidus	cold water
balneum	a bath
b.i.d., bis in dies	twice a day
c. m. s., cras mane sumendus	to be taken to-morrow morning
c. n., cras nocte	to-morrow night

cap., capiat	let (the patient) take
cataplasma	a poultice
charta	a paper (a powder in paper)
co., compositus	compound
coch., cochleare	a spoonful
coch. mag., cochleare magnum	a tablespoonful (about 4 fluid drachms)
coch. med., cochleare medium	a dessertspoonful (about 2 fluid drachms)
coch. parv., cochleare parvum	a teaspoonful (about 1 fluid drachm)
cong., congius	a gallon
collut., collutorium	a mouth wash
cyath., cyathus	a wineglass

detur	let it be given
d.t.d. dentur tales doses	let such doses be given
dosis	a dose
emeticum	an emetic
emp., emplastrum	a plaster
ext., extractum	an extract
f. or ft., fiat or fiant	let it (or let them) be made
f. haust., fiat haustus	let a draught be made
f.s.a., fiat secundum artem	let it be made according to art
fl., fluidus	fluid
gargarisma	a gargle
gr., granum	a grain
gtt., gutta or guttæ	a drop or drops
h.s., hora somni	at bed-time
haust., haustus	a draught
nj., injectio	an injection
lin., linimentum	a liniment
liq., liquor v. liquidum	a liquor or liquid
lot., lotio	a lotion
m.b., misce bene	mix well
m. dict., more dictu	as directed
mane	in the morning
mane pr., mane primo	early or first thing in the morning
min., minimum	a minim
misce	mix thou
mist., mistura	a mixture
nocte	at night
no., numero	in number
o., octavius	a pint
o.m., omni mane	every morning
o.n., omni nocte	every night
omn. hor., omni hora	every hour
p.r.n., pro re nata	occasionally

p. æq., partes æquales	equal parts
pil., pilula	a pill
pulv., (1) pulvis	a powder
(2) pulverisatus	powdered
q.q.h., quaque quatuor horæ	every four hours
q.s., quantum sufficit	as much as is sufficient
rep., repetatur v. repetantur	let it (or them) be repeated
s.o.s., si opus sit	if necessary
ss., semis v. semissis	half
sig., signetur	let it be signed
spt., spiritus	a spirit
syr., syrupus	a syrup
st., sumat	let the patient take
sum., (1) sumatur v. sumantur	let it (or them) be taken
(2) sumendus	to be taken
t.i.d., ter in die	three times a day
tab., tabella	a tablet
talis	such as, like this
tr. v. tinct., tinctura	a tincture
troch., troschisci	lozenges

WEIGHTS AND MEASURES.

The weights and measures in general use by prescribers in this country are the Apothecaries' Weights and Measures. As the Metric System is gaining repute, however, and has been inserted into the British and United States Pharmacopœias, an equivalent is given.

APOTHECARIES' WEIGHT.				**METRIC WEIGHT.**
Gr.i.	=	1 Grain	=	0·0648 Gramme.
℈i.	=	1 Scruple (20 Grains)	=	1·296 Grammes.
ʒi.	=	1 Drachm (3 Scruples)	=	3·888 Grammes.
℥i.	=	1 Ounce (8 Drachms)	=	31·1035 Grammes.

APOTHECARIES' MEASURE.				**METRIC MEASURE.**
Min.i.	=	1 Minim	=	0·059 Millilitres.
Fl.℈i.	=	1 Fluid Scruple (20 minims)	=	1·184 Millilitres.
Fl.ʒi.	=	1 Fluid Drachm (60 Minims)	=	3·552 Millilitres.
Fl.℥i.	=	1 Fluid Ounce (8 Drachms)	=	2·841 Centilitres.
O.i.	=	1 Pint (20 Ounces)	=	0·568 Litre.

N.B.—The quantities of the ingredients of a prescription are expressed by the sign, followed by Roman numerals. Examples:—

One Grain is written — gr i.
Two Scruples is written — ℈ii.
Five Drachms is written — ʒv.

Eight Ounces is written — ℥viii.
Ten Ounces is written — ℥x.
&c., &c.

DOSES.

Doses are usually decreased for patients of advanced years, and for children.

The accepted rule for ascertaining the dose for a child under the age of twelve, is to divide the age of the child by the age + 12; and multiply the adult dose by the result.

EXAMPLE.

It is required to find the dose of a drug, the adult dose of which is 10 grains, for a child 3 years old.

$$\frac{\text{AGE}}{\text{AGE} + 12} = \frac{3}{3 + 12} = \frac{3}{15} = \frac{1}{5} \times \frac{10}{1} = 2$$

The dose for the child is therefore 2 grains.

To find the proportionate dose for any age between 12 and 20, take one-twentieth of the maximum adult dose, and multiply the result by the age.

EXAMPLE.

It is required to find the dose of a drug, of which the maximum adult dose is 10 grains, for a youth 16 years of age.

$$\frac{1}{20} \times \frac{10}{1} = \frac{1}{2} \times \frac{16}{1} = 8 \text{ grains, for a youth 16 years of age.}$$

The exceptions to these rules are of little interest to the dental surgeon. Generally speaking however, the dose of purgatives should be greater, and of narcotics less, than indicated by the rule.

TABLE OF DOSES

Abridged to meet the requirements of the Dental Surgeon.

* Non-official, *i.e.*, not in the British Pharmacopœia.

Acid Arseniosum	gr. $\frac{1}{60}$—gr. $\frac{1}{15}$
Acid Carbolicum Liquefactum	min. 1—min. 3
Acid Gallicum	gr. 5—gr. 15
Acid Nitro-hydrochlor. dil.	min. 5—min. 20
Acid Tannicum	gr. 2—gr. 5
Æther	min. 10—min. 60
Amyl Nitris (mouth)	min. $\frac{1}{2}$—min. 1
,, (inhaled)	min. 2—min. 5
Antifebrinum	gr. 1—gr. 3
Antipyrinum (Phenazonum)	gr. 5—gr. 20
Apomorphinæ Hydrochloridum	gr. $\frac{1}{20}$—gr. $\frac{1}{4}$
*Aspirin	gr. 5—gr. 15
Atropina	gr. $\frac{1}{200}$—gr. $\frac{1}{100}$
Bismuthi Carbonas	gr. 5—gr. 20
Butyl-Chloral Hydras	gr. 5—gr. 20
Caffeinæ Citras	gr. 2—gr. 10
Calcii Chloridum	gr. 5—gr. 15
Calcii Hypophosphis	gr. 3—gr. 10
Calcii Lactas	gr. 5—gr. 15
Calomelas (Hydrarg-Subchlor	gr. $\frac{1}{10}$—gr. 5
Chloral Hydras	gr. 5—gr. 20
Cocainæ Hydrochloridum	gr. $\frac{1}{5}$—gr. $\frac{1}{2}$
Cupri Sulphas (astringent)	gr. $\frac{1}{4}$—gr. 2
,, (emetic)	gr. 5—gr. 10
Ext. Cascaræ Sagradæ Liq.	dr. $\frac{1}{2}$—dr. 1
Ext. Ergotæ Liq.	min. 10—min. 30
*Ferri Hypophosphis	gr. 1—gr. 5
Ferri et Quinæ Citras	gr. 5—gr. 10
*Guaiacol	min. 1—min. 5
*Guaiacol Carbonas	gr. 5—gr. 10

Hydrarg. Perchloridum	gr. $\frac{1}{32}$—gr. $\frac{1}{16}$
Liquor Arsenicalis (Fowler)	min. 2—min. 8
Liquor Ferri Perchlor.	min. 5—min. 15
Liquor Hydrarg. Perchlor.	dr. $\frac{1}{2}$—dr. 1
Liq. Morphinæ Hydrochlor.	min. 10—min. 60
Liq. Strychninæ Hydrochlor	min. 2—min. 8
Lithii Citras	gr. 5—gr. 10
*Lithii Salicylas	gr. 5—gr. 10
Magnesii Carbonas	gr. 5—gr. 60
Magnesii Sulphas	gr. 30—oz. $\frac{1}{2}$
Morphinæ Hydrochloridum	gr. $\frac{1}{8}$—gr. $\frac{1}{2}$
Oleum Ricini (castor oil)	dr. 1—dr. 8
Phenacetinum	gr. 5—gr. 10
Phosphorus	gr. $\frac{1}{100}$—gr. $\frac{1}{20}$
Pil. Hydrargyri (blue pill)	gr. 4—gr. 8
*Pituitary Gland Extract	min. 8—min. 17
Potassii Bicarbonas	gr. 5—gr. 30
Potassii Bromidum	gr. 5—gr. 30
Potassii Chloras	gr. 5—gr. 15
Potassii Iodidum	gr. 5—gr. 20
Quinine Salts	gr. 1—gr. 10
Salicinum	gr. 5—gr. 20
Sodii Bicarbonas	gr. 5—gr. 30
Sodii Salicylas	gr. 10—gr. 30
Sodii Sulphas	gr. 30—oz. $\frac{1}{2}$
Spt. Ætheris Nitrosi	min. 20—min. 90
Spt. Ammon. Aromat.	min. 20—min. 90
Strychnina (and its salts)	gr. $\frac{1}{60}$—gr. $\frac{1}{15}$
Sulphonal	gr. 10—gr. 30
Syr. Ferri Phosph. c Quininâ et Strychninâ (Easton)	dr. $\frac{1}{2}$—dr. 1
Syr. Ferri Phosph. Co.	dr. $\frac{1}{2}$—dr. 2
Thyroid Gland	gr. 3—gr. 10
Tinct. Aconiti	min. 5—min. 15
Tinct. Digitalis	min. 5—min. 15
Tinct. Ferri Perchloridi	min. 5—min. 15

TABLE OF DOSES—*continued.*

Tinct. Gelsemii	min. 5—min. 15	*Trional	gr. 10—gr. 30
Tinct. Iodi	min. 2—min. 5	*Veronal	gr. 5—gr. 10
Tinct. Nucis Vomicæ	min. 5—min. 15	Vinum Ipecacuanhæ (emetic)	dr. 4—dr. 6
Tinct. Quininæ Ammon.	dr. $\frac{1}{2}$—dr. 1	Zinci Sulphas (emetic)	gr. 10—gr. 30
Tinct. Strophanthi	min. 5—min. 15		

HYPODERMIC DOSE TABLE.

These doses are, generally speaking, smaller than by the mouth.

It is advisable to use "Tablets" of standard strength.

Apomorphinæ Hydrochlor.	gr. $\frac{1}{20}$—gr. $\frac{1}{10}$	Eucainæ Lactas	gr. $\frac{1}{10}$—gr. $\frac{1}{2}$
Atropinæ Sulphas	gr. $\frac{1}{200}$—gr. $\frac{1}{100}$	Morphinæ Hydrochloridum	gr. $\frac{1}{8}$—gr. $\frac{1}{4}$
Cocainæ Hydrochloridum	gr. $\frac{1}{10}$—gr. $\frac{1}{2}$	Strychninæ Hydrochloridum	gr. $\frac{1}{150}$—gr. $\frac{1}{10}$

SOLUBILITIES.

A Table of Chemicals in frequent use or prescribed by the Dental Surgeon.

The numbers in the various columns indicate the number of parts of the Menstrua in which one part of the Chemical is Soluble.

NAME OF CHEMICAL.	WATER.	ALCOHOL 90 %.	ETHER.	GLYCERINE.
ACIDUM ARSENIOSUM	100	sparingly	—	5
ACIDUM BORICUM	30	30	—	10
ACIDUM CARBOLICUM	12	very sol.	very sol.	very sol.
ACIDUM GALLICUM	100	5	—	—
ACIDUM TANNICUM	1	1	—	2
ALUMEN	10	insol.	—	3
AMMONII BROMIDUM	1·2	12·5	—	—
ARGENTI NITRAS	0·54	24	—	readily
CAFFEINÆ CITRAS	32	22	—	—
CALCII CHLORIDUM	1	3	—	—
CHLORAL HYDRAS	very sol.	very sol.	very sol.	very sol.
COCAINÆ HYDROCHLORIDUM ...	0·5	4	—	—
CUPRI SULPHAS	3·5	almost insol.	—	4

Name of Chemical.	Water.	Alcohol 90 %.	Ether.	Glycerine.
Eucainæ Lactas	4	8	—	—
Hydrargyri Perchloridum ...	16	3	4	15
Iodoform	sparingly	80	6	—
Iodum	5000	10	3	—
Lithii Citras	2	almost insol.	—	—
Magnesii Sulphas	1	insol.	—	—
Menthol	insol.	readily	readily	—
Morphinæ Hydrochloridum ...	24	50	—	5
Oleum Cajeputi	almost insol.	in all proportions	—	—
Oleum Cinnamomi	,,	0·3	—	—
Oleum Caryophylli	,,	in all proportions	—	—
Oleum Eucalypti	,,	0·3	—	—
Oleum Menthæ Piperitæ ...	,,	0·5	—	—
Oleum Anisi	,,	4	—	—
Phenacetin	1400	16	—	—
Phenazonum (Antipyrin)	1	1·3	50	—
Potassii Bromidum	2	200	—	4
Potassii Chloras	16	insol.	—	32
Potassii Iodidum	0·75	12	—	2·5
Potassii Permanganas	20	decomposes	—	explosive
Quininæ Hydrochloridum ...	35	3	—	—

NAME OF CHEMICAL.	WATER.	ALCOHOL 90 %.	ETHER.	GLYCERINE.
QUININÆ SULPHAS	800	86	—	—
SACCHARIN (GLUSIDUM)	400	25	—	—
SODII BIBORAS	25	insol.	—	—
SODII BICARBONAS	11	insol.	—	—
SODII BROMIDUM	1·2	16	—	1
SODII CHLORIDUM	2·8	almost insol.	—	—
SODII SALICYLAS	0·9	6	—	readily
SODII SULPHAS	2·8	insol.	—	1
STRYCHNINÆ HYDROCHLORIDUM ...	35	60	—	—
SULPHONAL	450	50	—	—
THYMOL	1100	very sol.	—	—
VERONAL	160	8·5	—	—
ZINCI SULPHAS	0·53	insol.	—	3

INCOMPATIBILITY.

It is important in prescribing that care be taken not to order substances to be mixed together, which are pharmaceutically, therapeutically or chemically incompatible.

BRIEF SUMMARY OF INCOMPATIBLES.

Name.	Incompatible with
Acids	Alkalies, Acetates, Metallic Oxides.
Alum	Alkalies, Alkaline Carbonates, Borax.
Bi-carbonate of Soda ...	Acids, Metallic Salts, Alkaloidal Salts.
Borax	Silver Nitrate, Zinc Salts, Cocaine Hydrochloride.
Bromides	Iron Salts, Nitrate of Silver.
Calomel	Alkalies.
Chlorate of Potash ...	Mineral Acids, Organic Substances.
Chromic Acid	Alcohol, Ether, Glycerine, Organic Substances.
Essential Oils	All aqueous solutions.
Iodine	Ammonia, Metallic Salts.
Iron Salts	Alkaline Carbonates, Tannic Acid.
Nitrate of Silver ...	Chlorides, Bromides, Iodide of Potassium, Sulphate of Zinc.
Permanganate of Potash	Organic substances.
Sulphate of Magnesia ...	Carbonates, Chloride of Calcium.
Tannic Acid	Mineral Salts and Acids, Alkaline Carbonates and Bi-carbonates.

POISONS AND ANTIDOTES.

A Poison (potio = a draught) is a substance, which, on its introduction into the body, by the mouth, or through the skin, either by a wound or an abrasion, absorption or injection, causes injury of the organs, deranges vital processes, and causes death.

Substances are relatively poisonous, the action depending on the quantity taken into the body, and the idiosyncrasy of the individual. Most drugs in excessive quantities are poisonous.

An Antidote (anti = against, do = I give) is a remedy which counteracts the injurious action of a poison.

Antidotes may be divided into three classes:—

(1) Mechanical, or those which intervene between the poison and the surface in contact with it.

(2) Chemical, or those which by interaction with the poison produce a non-injurious compound.

(3) Physiological, or those which combat and nullify the physiological action of the poison.

In the following table the mechanical antidotes include emptying the stomach and demulcents.

The various methods by means of which a stomach may be emptied of its poisonous contents are:—

(1) Lavage, by means of a soft stomach tube, and warm water in which the chemical antidote has been dissolved or suspended.

(2) By means of a stomach pump or stomach tube used as a siphon.

(3) By the administration of emetics.

N.B.—These methods must not be adopted in cases of poisoning by corrosives as the condition of the œsophagus and stomach would induce perforation.

EMETICS MOST USEFUL IN CASES OF POISONING.

Apormorphine Hydrochloride	$\frac{1}{10}$ grain. Hypodermic Injection.
Powdered Ipecacuanha	30 grains in water.
Liquid Extract of Ipecacuanha	20 minims in water.
Ipecacuanha Wine	6 drachms.
Mustard	1 tablespoonful in water.
Common Salt	2 tablespoonfuls in water.
Zinc Sulphate	30 grains in water.
Copper Sulphate	10 grains in water.

STIMULANTS MOST USEFUL IN CASES OF POISONING.

1.	Brandy	A tablespoonful in water.
2.	Strychnine Hydrochloride	$\frac{1}{60}$ grain. Hypodermic Injection.
3.	Ether	30—60 minims. Hypodermic Injection.
4.	Sal Volatile	One teaspoonful in water.
5.	Hot Coffee	Four tablespoonfuls boiled with half-a-pint of water.

TABLE OF POISONS, SYMPTOMS AND ANTIDOTES.

* Do not use Stomach Tube or Emetic. *c*. Chemical Antidote. *p*. Physiological Antidote.

† Apomorphine Hydrochlor is the best Emetic in this case.

The figures following Stimulants indicate those recommended in an individual case.

Poisons.	Symptoms.	Antidotes. Physiological and Chemical.	Antidotes. Mechanical.	Other Treatment.
* **ACIDS, MINERAL** Hydrochloric Nitric Sulphuric	Pain in mouth, throat and abdomen, partial destruction of mucous membrane. Vomiting of altered blood. Extreme collapse.	Carbonate of Magnesia, Calcium, Sodium or Potassium, one tablespoonful in or with a tumbler of water. (*c*). Whitening, Chalk, or Wall Plaster as above. (*c*). Bicarbonate of Sodium or Potassium, failing the above. (*c*).	Milk. White of Egg. Thick Gruel.	

POISONS.	SYMPTOMS.	ANTIDOTES.		OTHER TREATMENT.
		PHYSIOLOGICAL AND CHEMICAL.	MECHANICAL.	
ACID, CARBOLIC CREOSOTE AND DISINFECTING FLUID	As Mineral Acids. Lips and mouth white and hard. May cause instant death from arrest of respiration.	Sodium or Magnesium Sulphate (Epsom Salts) one tablespoonful, in a tumbler of warm water. (*c*).	Lavage with care with the chemical antidote until the fluid from the stomach no longer smells of Carbolic Acid. Milk freely. Olive Oil, half a tumblerful.	Stimulants freely. Artificial respiration. Saline infusion.
ACID, HYDROCYANIC CYANIDES	Giddiness, insensibility, loss of motor power. Convulsions. Laboured respiration. Profound collapse. The symptoms arise immediately the poison is swallowed, and all treatment must be promptly carried out to be of any avail.	Dissolve 15 grains of Sulphate of Iron in half a tumbler of water, add to it about 30 drops of Tincture or Solution of Perchloride of Iron. To this add from one to two teaspoonfuls of Carbonate of Magnesia, previously mixed with a little water and give immediately. (*c*).	Stomach to be emptied if in time.	Fresh air. Cold douche. Artificial respiration. Stimulants 1, 3, 4.

POISONS.	SYMPTOMS.	ANTIDOTES.		OTHER TREATMENT.
		PHYSIOLOGICAL AND CHEMICAL.	MECHANICAL.	
ACONITE TINCTURE LINIMENT ACONITINE	Tingling of lips, mouth, skin. Nausea, vomiting. Impairment of sight, hearing, speech. Dyspnœa. Skin cold and clammy. Giddiness. Mind remains clear.	Tincture of Digitalis, by mouth, min. 20, or hypodermically, gr. 1/100 of Digitalin. (*p*).	Stomach tube or emetic.	Recumbent position. Artificial respiration. Warmth to extremities. Stimulants, 1, 2. Saline infusion.
ALCOHOL (ACUTE)	Face flushed, lips livid, cerebral incoordination, coma, with stertorous breathing in stage of reaction. Headache, nausea, vomiting.		Stomach tube or emetic, if necessary.	Cold affusion. Hot Coffee. Artificial respiration. Warmth to extremities.

Poisons.	Symptoms.	Antidotes.		Other Treatment.
		Physiological and Chemical.	Mechanical.	
* **ALKALIES CAUSTIC** Ammonia Soda Potash	Pain in throat, œsophagus and abdomen. Vomiting of altered blood. Purging. Body cold, with cold sweat. Prostration. Pulse, rapid and weak.	Tartaric or Citric Acid, 20grs. in half a tumbler of water. Vinegar or Lemon Juice, 2 tablespoonfuls diluted with water. (*c*).	Milk freely. Olive Oil, half a tumblerful. White of Egg.	Stimulants freely.
ANTIFEBRIN Antipyrin Phenacetin	Vomiting. Face flushed. Profuse sweating. Collapse.			Stimulants 1, 4, 2. Warmth to extremities. Artificial respiration.
ARSENIC and its Preparations	Incessant vomiting and purging. Severe abdominal pain. Collapse.	Hydrated Ferric Oxide, prepared freshly by mixing together one tablespoonful of Solution of Perchloride of Iron in a wineglassful of water and two teaspoonfuls of Solution of Ammonia.	Stomach tube or emetic. Milk freely, Olive Oil, half a tumbler. White of egg. Thick gruel.	Stimulants 1, 2, 4, for prostration. Warmth to extremities.

Poisons.	Symptoms.	Antidotes.		Other Treatment.
		Physiological and Chemical.	Mechanical.	
ATROPINE (Belladonna, and its Preparations)	Skin flushed. Temperature raised. Rapid wiry pulse. Pupils widely dilated, vision and accommodation impaired. Respiration feeble. Urine suppressed. Delirium.	Tannic Acid, 20grs. in water or strong overdrawn tea. (*c*). Nitrate of Pilocarpine, $\frac{1}{4}$ gr. injected hypodermically. (*p*).	Stomach tube or emetic.	Artificial respiration. Stimulants 1, 5. Warmth to extremities.
CHLORAL-HYDRATE	Skin pale or livid and covered with sweat. Pulse feeble. Respiration at first laboured then shallow and feeble. Coma.		Stomach tube or emetic.	Warmth. Stimulants, 2, 1 Artificial respiration.

Poisons.	Symptoms.	Antidotes.		Other Treatment.
		Physiological and Chemical.	Mechanical.	
CHLOROFORM	Heart failure Failure of respiration } In Anæsthesia.	Amyl Nitrite Capsules, 3 mins. for inhalation. (*p*).		Pull tongue forward. Recumbent attitude. Fresh air. Artificial respiration. Stimulants, 1, 2, 3. Heart massage.
COCAINE Salts and Analogues	Skin pale. Giddiness and fainting. Pulse rapid. Respiration rapid. Convulsions.	Amyl Nitrite Capsules, 3 mins. for inhalation. (*p*).	Stomach tube.	Stimulants, 1, 2, 4. Artficial respiration.

POISONS.	SYMPTOMS.	ANTIDOTES.		OTHER TREATMENT
		PHYSIOLOGICAL AND CHEMICAL.	MECHANICAL.	
COPPER SULPHATE (ACUTE)	Salivation. Burning abdominal pain. Vomiting bluish liquid. Giddiness. Epileptiform convulsions. Jaundice. Coma.	Bicarbonate of Soda or Potash, two teaspoonfuls in water. (*c*). Ferrocyanide of Potash, 10 grains in four tablespoonfuls of water, repeated. (*c*).	Large quantities of milk, previous to emptying stomach by the stomach tube or an emetic if vomiting has not been caused by the poison.	
ETHER	Muscular relaxation. Pulse increased in force and frequency, in large overdoses feeble. Respiration stertorous, in large overdose, shallow. Coma.			Head low, if pale. Warmth. Friction, flagellation. Artificial respiration. Stimulants, 1, 2, 3.

Poisons.	Symptoms.	ANTIDOTES.		Other Treatment.
		Physiological and Chemical.	Mechanical.	
IODINE (Iodides Acute)	Pain in throat. Severe abdominal pain. Vomiting and purging. Metallic taste in mouth. Intense thirst. Giddiness. Convulsions.	Bicarbonate of Soda, two teaspoonfuls in half a tumbler of water. (*c*). Starch, with cold water. (*c*).	Stomach tube or emetic. Milk, copiously. Gruel. White of egg.	
(Chronic)	Frontal Headache Eyes and nose water. Salivation. Atrophy of the glands (mammæ and testes).	Bicarbonate of Soda, in large doses. (*c*).		Cease administration or give large doses of the poison, thus inhibiting the function of the glands.
LEAD AND ITS SALTS (Acute)	Metallic taste in mouth. Abdominal pain. Diarrhœa or obstinate constipation. Vomiting may occur. Intense thirst. Convulsions. Coma.	Sulphate of Magnesium (Epsom Salts) or Sodium, a tablespoonful in a tumbler of water. (*c*).	Stomach tube or emetic. Milk, freely. White of egg, freely.	

Poisons.	Symptoms.	Antidotes. Physiological and Chemical.	Antidotes. Mechanical.	Other Treatment.
MERCURY, SALTS OF (Acute)	Metallic taste in mouth. Pain in stomach. Nausea, vomiting and purging. Skin cold and clammy. Collapse.		Large quantities of milk and white of egg, previous to stomach tube or emetic.	Tincture of opium, 20 mins. in water to relieve pain and purging. Stimulants, 1, 4, if depressed.
OPIUM (and its Preparations), **MORPHIA** (and its Salts)	Headache—Face cyanosed. Drowsiness, leading to coma. Stertorous respirations. Pulse feeble. Pin-hole pupils.	Permanganate of Potash, 5 grains in a tumblerful of water. (*c*).	Stomach tube or emetic. Lavage with a weak solution of Pot. Permang.	Forced movements. Cold water dashed on face. Stimulants freely. Artificial respiration.

Poisons.	Symptoms.	ANTIDOTES.		Other Treatment.
		Physiological and Chemical.	Mechanical.	
PHOSPHORUS	Stage I. Garlic taste. Abdominal pain. Intense thirst. Vomiting, vomit has garlic odour. Stage II. Intermission of symptoms for two or three days or more. Stage III. Jaundiced. Enlarged liver. Cold sweats. Feeble pulse. Coma.	Copper Sulphate, 3 grains in half a tumbler of water every five minutes until vomiting is induced, then every fifteen to thirty minutes. (*c*). French Turpentine or Sanitas, half a teaspoonful in two tablespoonfuls, repeated every quarter of an hour for four doses, then three times a day. (*c*).	Stomach tube or emetic. Milk, freely. White of egg. — Caution. Avoid oils.	

Poisons.	Symptoms.	ANTIDOTES.		Other Treatment.
		Physiological and Chemical.	Mechanical.	
SILVER NITRATE	Pain in abdomen. Vomiting of white and curdy matter, which blackens on exposure to light. Prostration.	Common Salt, two tablespoonfuls in a tumblerful of water. (*c*).	Emetic after administration of chemical antidote to remove insoluble chloride. White of egg freely.	
STRYCHNINE NUX VOMICA	Intermittent, painful tetanic convulsions, causing oposthotonos, Risus sardonicus.	Tannic Acid, 20 grains in water or strong overdrawn tea. (*c*).	Stomach tube or emetic† following administration of chemical antidote.	Chloroform to control convulsions to permit of other treatment.
	Spasm of respiration, producing asphyxia	Bromide of Potassium 30-60 grains in water. (*p*). Chloral Hydrate 40 grains in water by mouth or rectum. (*p*).		Artificial respiration.

Poisons.	Symptoms.	Antidotes.		Other Treatment.
		Physiological and Chemical.	Mechanical.	
SULPHONAL **TRIONAL** **VERONAL**	Abdominal pain. Vomiting. Constipation. Confusion of mind. Partial paralysis. Collapse.		Stomach tube or emetic.	Warmth to extremities. Stimulants 2, 1, 4, 5. Artificial respiration.
***ZINC SALTS**	Abdominal pain. Lips and mouth corroded. Nausea. Vomiting. Convulsions. Coma.	Carbonate or Bicarbonate of Sodium or Potassium, two to four teaspoonfuls in water. (*c*).	White of egg and milk freely.	

FORMULÆ.

ANÆSTHETICS.

General.

A.C.E. MIXTURE.

Alcohol 90%	1 part
Chloroform	2 parts
Ether	3 parts

Mix.

Local.

(1)

Cocaine Hydrochloride	3 grains
Adrenaline	1 drachm
Solution of Hamamelis	7 drachms

Mix.

(2)

Eucaine Hydrochloride B. ...	⅕ grain
Adrenaline	3 minims
Solution of Hamamelis	20 minims

Mix.

(3)

Novocaine	2 grains
Normal Saline Solution	100 minims

Mix.

Add 1 drop of Adrenaline to 20 minims immediately before use.

CACHETS OR POWDERS.

Analgesic and Antipyretic.

(1)

Antipyrin	5 grains
Sulphate of Quinine	½ grain

Mix and make one dose.

(2)

Aspirin	5 grains
Phenacetin	4 grains
Citrate of Caffeine	1 grain

Mix and make one dose.

(3)

Citrate of Caffeine	1 grain
Phenacetin	4 grains

Mix and make one dose.

DEVITALISING PASTE.

Arsenic	40 grains
Sulphate of Morphia	20 grains

Creosote, a sufficient quantity to make a stiff paste.

DRAUGHTS.

Aperient. (Mistura Alba).

Carbonate of Magnesia	10 grains
Sulphate of Magnesia	1 drachm
Peppermint Water to	1 ounce

Mix and make one draught.

Hypnotic.

Chloral Hydrate	10 grains
Bromide of Potassium	10 grains
Syrup of Orange	1 drachm
Distilled Water	1½ ounces

Mix and make one draught.

DRESSINGS.

Anodyne.

(1)

Camphor	1 ounce
Chloroform	2 ounces
Creosote	2 drachms
Eugenol	1 drachm

Mix.

(2)

Chloretone	30 grains
Salicylate of Methyl	10 minims
Eugenol	30 minims

Mix.

(3)

Carbolic Acid	2 parts
Camphor	3 parts

Mix.

Bismuth Paste (Beck).

Subnitrate of Bismuth	30 parts
White Wax	5 parts
Hard Paraffin	5 parts
Soft Paraffin	60 parts

Mix by the aid of heat.

Carbolic Resin.

Carbolic Acid	3 drachms
Powdered Resin	4 drachms
Chloroform	2 drachms

Mix.

Germicidal and Antiseptic.

Solution of Formaldehyde, 40%	1 drachm
Trikresol	1 drachm
Thymol	10 grains
Alcohol, 90%	2 drachms

Mix.

Mummifying Paste.

Dried Alum	1 drachm
Thymol	1 drachm
Glycerine	1 drachm

Oxide of Zinc, q.s., to make a paste.

Mix.

Pulp Capping.

Oxide of Zinc	10 grains

Eugenol, q.s., to make a paste.

Mix.

N.B.—This may also be used as a root filling.

Liniments and Paints.

Anodyne.

(1)

Camphor	1 part
Chloral Hydrate	1 part

Mix and make a paint.

(2)

Camphor	2 parts
Chloroform	1 part

Mix and make a liniment.

(3)

Anodyne and Counter-Irritant.

Solution of Iodine	1 drachm
Tincture of Iodine	1 drachm
Tincture of Aconite (Flemming)	2 drachms

Mix and make a paint.

Antiseptic and Stimulating Paint.

Carbolic Acid	20 minims
Lactic Acid	20 minims
Glycerine	2 drachms
Acetone	2 drachms
Alcohol, 90%	4 drachms

Mix and make a paint.

Rubefacients.

(1)

Liniment of Camphor	1 ounce
Liniment of Chloroform	½ ounce
Liniment of Soap	to 3 ounces

Mix and make a liniment.

(2)

Menthol	1 drachm
Liniment of Camphor	to 3 ounces

Mix and make a liniment.

(3)

Liniment of Aconite	1 part
Liniment of Belladonna	1 part
Liniment of Chloroform	1 part

Mix and make a liniment.

Zinc Chloride.

Powdered Gum Mastic	1 drachm
Chloroform	½ ounce
Chloride of Zinc	5 grains

Mix and make a paint.

MIXTURES FOR INTERNAL ADMINISTRATION.

(1)

Acid Quinine Mixture.

Sulphate of Quinine	30 grains
Dilute Phosphoric Acid	1 drachm
Solution of Strychnine	12 minims
Syrup of Orange	½ ounce
Distilled Water	to 6 ounces

Mix.

Dose:—One tablespoonful, to be taken three times a day before meals.

(2)

Alkaline Gentian Mixture.

Bicarbonate of Soda	2 drachms
Infusion of Gentian	to 6 ounces

Mix.

Dose :—One tablespoonful, to be taken three times a day after meals.

(3)

Bismuth and Soda Mixture.

Bicarbonate of Soda	2 drachms
Sub-Carbonate of Bismuth	2 drachms
Peppermint Water	to 6 ounces

Mix.

Dose :—One tablespoonful, to be taken a quarter of an hour before meals.

(4)

Iron and Chlorate of Potash Mixture.

Tincture of Perchloride of Iron	1 drachm
Chlorate of Potash	1½ drachms
Glycerine	4 drachms
Sulphate of Magnesia	4 drachms
Syrup of Orange	4 drachms
Distilled Water	to 6 ounces

Mix.

Dose :—One tablespoonful three times a day after food.

(5)

Iron and Quinine Mixture.

Citrate of Iron and Quinine	1½ drachms
Tincture of Orange	2 drachms
Glycerine	4 drachms
Chloroform Water	to 6 ounces

Mix.

(contd.)

Iron and Quinine Mixture—contd.

Dose :—One tablespoonful to be taken three times a day before meals.

N.B.—In cases of persistent neuralgia, add 1 drachm of Tincture of Gelsenium to the six-ounce mixture.

(6)

Sedative Mixture.

Bromide of Potassium	40 grains
Bromide of Sodium	40 grains
Bromide of Ammonium	40 grains
Tincture of Cannabis Indica ...	1 drachm
Mucilage of Acacia	1 ounce
Syrup of Orange	½ ounce
Chloroform Water	to 6 ounces

Mix.

Dose :—One tablespoonful to be taken every four hours if required.

(7)

Tonic Syrup Mixture.

Compound Syrup of Phosphates...	4 drachms
Easton's Syrup	4 drachms
Compound Syrup of Hypophosphites	4 drachms
Distilled Water	to 6 ounces

Mix.

Dose :—A tablespoonful in a wineglass of water to be taken immediately after meals.

(8)

White Mixture (Mistura Alba).

Heavy Carbonate of Magnesia ...	1 drachm
Sulphate of Magnesia	6 drachms
Peppermint Water	to 6 ounces

Mix.

Dose :—A sixth part to be taken three times a day between meals.

MOUTH WASHES.

Alkaline.

Bicarbonate of Soda	2 drachms
Chloride of Soda	2 drachms
Biborate of Soda	2 drachms
Peppermint Water	to 10 ounces

Mix and make a mouth wash. One tablespoonful in half a tumbler of warm water to be used as directed.

Alkaline Antiseptic.

(Glycerin Thymol Co. B.P.C.)

Bicarbonate of Soda	100 grains
Biborate of Soda	200 grains
Benzoate of Soda	80 grains
Salicylate of Soda	40 grains
Menthol	2 grains
Oil of Pine	4 minims
Oil of Wintergreen	2 minims
Thymol	4 grains
Eucalyptol	12 minims
Alcohol 90%	4 drachms
Glycerine	2 ounces
Solution of Carmine	40 minims
Distilled Water	40 ounces

Mix and make a mouth wash. One teaspoonful in half a tumbler of water as directed.

Antiseptic.

Solution of Potash	6 drachms
Liquid Carbolic Acid	4 drachms
Peppermint Water	to 6 ounces

Mix and make a mouth wash. One teaspoonful in half a tumbler of warm water, to be used frequently, or as directed.

Antiseptic and Astringent.

Iodide of Potassium	20 grains
Tannic Acid	2 drachms
Tincture of Iodine	2 drachms
Tincture of Myrrh	2 drachms
Rose Water	to 10 ounces

Mix and make a mouth wash. One tablespoonful in half a tumbler of warm water, to be used as directed.

Astringent.

(1)

Solution of Hamamelis	1 ounce
Biborate of Soda	2 drachms
Tincture of Rhatany	2 drachms
Distilled Water	to 6 ounces

Mix and make a mouth wash. Shake the bottle. One tablespoonful to be added to half a tumbler of warm water, and used as directed.

(2)

Tincture of Myrrh	1 ounce
Tincture of Rhatany	1 drachm
Compound Tincture of Lavender	1 drachm
Glycerine of Borax	2 drachms
Eau de Cologne	to 4 ounces

Mix and make a mouth wash. Ten to fifteen drops in half a tumbler of warm water, to be used as directed.

Astringent and Stimulating.

Chlorate of Potash	4 drachms
Tincture of Myrrh	4 drachms
Saturated Solution of Boric Acid	4 ounces
Peppermint Water	to 8 ounces

Mix and make a mouth wash. Shake the bottle. One tablespoonful in half a tumbler of warm water, to be used as directed.

Elixir Dentrifice.

Benzoic Acid	48 grains
Chloroform	12 minims
Oil of Aniseed	5 minims
Oil of Peppermint	10 minims
Tincture of Cinnamon	1½ drachms
Solution of Carmine	q.s.
Alcohol 90%	to 4 ounces

Mix and make an elixir. Ten to twenty drops in half a tumbler of water.

TOOTH PASTES AND POWDERS.

(1)

Powdered Hard Soap	1 drachm
Thymol	5 grains
Heavy Carbonate of Magnesia	2 drachms
Benzoate of Soda	20 grains
Eucalyptol	5 minims
Salicylate of Methyl	10 minims
Prepared Chalk	2½ ounces
Glycerine	of each equal parts to make a paste
Rose Water	

Mix and make a tooth paste.

(2)

Powdered Hard Soap	1 drachm
Heavy Carbonate of Magnesia	2 drachms
Saccharin	3 grains
Carmine	2 grains
Salicylate of Methyl	10 minims
Precipitated Chalk	2½ ounces

Mix and make a tooth powder.

(3)

Powdered Orris Root	½ ounce
Chlorate of Potash	30 grains
Menthol	10 grains
Oil of Rose Geranium	10 minims
Prepared Chalk	1 ounce
Precipitated Chalk	2 ounces

Mix and make a powder.

DENTAL PLATE POWDER.

Powdered Borax	35 parts
Perborate of Soda	5 parts
Powdered Soap	10 parts

Mix.

PART IV.

HISTOLOGICAL TABLES.

TO WHICH ARE ADDED SPECIAL FORMULÆ AND METHODS.

TABLE A.

Term.	Definition.	Re-Agents.	Method of Use.	Remarks.
★ **FIXATION**	The process employed for (1) The rapid killing and hardening the elements of a tissue so that it retains the same form as it possessed during life, and subsequent treatment by chemical and mechanical agents does not bring about any change of form.	Acetic Acid Glacial	Aqueous solution from ·2 to 5%	Used chiefly in conjunction with other fixatives aiding penetration, counteracting shrinkage and aiding optical differentiation.
		Alcohol	In all strengths from 30% to absolute	Of doubtful value alone as a fixative, useful in mixtures.
(*contd.*)	(2) Rendering insoluble elements which would otherwise be washed away by the various liquids employed during after treatment.	Bichromate of Potash	Aqueous solution from 2 to 5%	Should be used with the addition of 5% Glacial Acetic Acid. Used frequently in combination with Sulphate of Soda (Müller's fluid *q.v.*), Perchloride of Mercury, &c.

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* Fixation is now generally understood to include "hardening" to the extent mentioned in the definition.

Term.	Definition.	Re-Agents.	Method of Use.	Remarks.
FIXATION (*contd.*)	(3) Producing optical differentiation by coagulation of certain of the tissue elements.	Chromic Acid	Aqueous solution from ·1 to 1%	Rarely used alone on account of its poor penetration 5% Glacial Acetic Acid should be added. Used in mixtures. (Flemming's Solution *q.v.*)
		Copper Acetate	Aqueous saturated solution	Little used for the dental tissues.
		Formaldehyde	Aqueous solutions from 2 to 10%	Used alone and in conjunction with Picric Acid, Muller's Fluid, &c. (*vide* Freeborn's Solution.)
		Mercuric Chloride	Aqueous saturated solution	Care must be taken to remove all traces of Mercury, by the addition of Iodine when "washing-out," otherwise sections will be brittle and present serious artefacts.
(*contd.*)				

TERM.	DEFINITION.	RE-AGENTS	METHOD OF USE.	REMARKS.
FIXATION *(contd.)*		Nitric Acid	Aqueous solution from 3 to 10%	Rarely used as a fixative.
		Osmic Acid	(*a*) Vapour from the solid (*b*) Aqueous solution ·1 to 1%	Must be used in the dark. Has poor penetration, and therefore is frequently used in combination with other fixatives.
		Picric Acid	Aqueous saturated solution	Used in cases where great penetration is required, also used in combination with Osmic and Chromic Acids.
WASHING OUT *(contd.)*	The process employed for the removal from a tissue, of all traces of reagents used in "fixation."	Alcohol	From 70 to 90% in large volumes or frequent changes	To remove:— Acetic Acid. Picric Acid. Nitric Acid.

TERM.	DEFINITION.	RE-AGENTS.	METHOD OF USE.	REMARKS.
WASHING OUT—*contd.*		Water	Running water of frequent changes	To remove :— Osmic Acid. Chromic Acid. Bi-chromate of Potash.
		Water or Alcohol	As above	Formaldehyde, Mercuric Chloride. Alcohol is to be preferred for the removal of Mercuric Chloride. In order to thoroughly remove all traces of Mercury, add Tincture of Iodine to the alcohol, or water until it has a port-wine colour. This must be repeatedly changed until the tissues no longer affect the colour.

TERM.	DEFINITION.	RE-AGENTS.	METHOD OF USE.	REMARKS.
HARDENING	The process employed for rendering soft tissue hard so as to allow of their being cut into sections without imbedding.	*vide* Fixation. Most fixatives may be used for hardening. There are, however, a few exceptions. (*Ex.* Mercuric Chloride.)	Large quantities of liquids are taken and the tissue suspended in it, commencing with weak solutions and gradually strengthening them.	Owing to improved imbedding methods, hardening is rarely resorted to as a separate general method, but more as a special process — where large sections are required and imbedding would be impracticable. *e.g.* Sections of brain.
DEHYDRATION	The process by means of which all superfluous aqueous reagents and the water of the tissue itself is removed.	Alcohol	In various strengths from 30% to Absolute	No efficient alternative reagent has been found, though Acetone and Anilin Oil have been used in special processes.

TERM.	DEFINITION.	RE-AGENTS.	METHOD OF USE.	REMARKS.
PRESERVATION	The method employed for keeping specimens after fixing and hardening—for an indefinite period, before subjecting it to subsequent treatment in such a way that it shall not undergo any change of form.	Alcohol	In various strengths from 30% to 70%	Specimens which are to be cut into sections should not be allowed to remain longer than is necessary in the preservation medium as this is liable to produce brittleness.
		Formaldehyde	In aqueous solutions of various strengths from 2% to 5%	
DECALCIFICATION	The process employed for removing inorganic calcific salts from a hard tissue so that it may be rendered sufficiently soft to permit of being cut into sections.	Chromic Acid	Aqueous solution, 1%	Rarely used alone as a decalcifying agent, but in combination with Hydrochloric or Nitric Acid to counteract the distortion of tissues said to be caused by these acids.
(contd.)		Formic Acid	Aqueous solution, 33%	Recommended for the rapid decalcification of teeth as it does not

TERM.	DEFINITION	RE-AGENTS.	METHOD OF USE.	REMARKS.
DECALCIFICATION —*contd.*				cause the distortion attributed to the mineral acids.
		Hydrochloric Acid	Aqueous solution, 10%	Decalcifies rapidly but is said to cause swelling of tissues.
		Lactic Acid	Aqueous solutions of various strengths	Has been recommended for the decalcification of teeth, but the advantages claimed for it are of doubtful value.
		Nitric Acid.	Aqueous solution from 1 to 3%	*vide* Hydrochloric Acid.
		Nitro-Hydrochloric Acid.	Aqueous Solution of various strengths.	Recommended for the rapid decalcification of teeth and bone.
(*contd.*)			10% Hydrochloric Acid, to which may be added 10% Nitric Acid and further	Objection has been made to the use of this reagent, as it is said to produce shrinkage and distortion of soft tissues. It is found,

TERM.	DEFINITION.	RE-AGENTS.	METHOD OF USE.	REMARKS.
DECALCIFICATION *—contd.*			addition of a similar quantity of Nitric Acid, to hasten the completion of the process. *cf.* Hopewell-Smith's method.	however, that, if due precautions are taken against rapid variations of temperature on the addition of the Nitric Acid, the soft tissues (*e.g.* the dental pulp) do not undergo any apparent change of form.
		Trichloracetic Acid	Aqueous solution from 4 to 5%.	*vide* Lactic Acid.
NEUTRALIZATION	The process by means of which all superfluous acid used during decalcification is removed from a tissue by means of alkalies.	Bicarbonate of Soda.	Aqueous solution, one drachm to a pint.	A weak solution—as indicated—is used to avoid violent reaction, which would be liable to cause injury to the tissue.
		Carbonate of Lithia.	Aqueous solution, one drachm to a pint.	

STAINING.

The process by means of which the various elements of tissues are differentiated.

Classification of Stains.	Classification of Dyes.	Classification of Tissue Elements according to their reaction to dyes.
(1) General, which affect all the elements of a tissue or preparation.	(1) Basic, *i.e.*, Salts with a colour base and a non-colour acid.	(1) Basophilous, which display an affinity for a basic dye.
(2) Selective. (*a*) Nuclear, which affect the nuclei of cells.	(2) Acid, *i.e.*, Salts with a colour acid and a non-colour base.	(2) Acidophilous, which display an affinity for an acid dye.
(*b*) Plasmatic, which affect all cell elements other than the nuclei.	(3) Neutral, *i.e.*, Salts having both a colour base and a colour acid.	(3) Neutrophilous, which display an affinity for a neutral dye.
(*c*) Specific, which affect some or one only of the elements of a tissue or preparation.		

N.B.—(1) Basic Dyes are usually nuclear stains. Acid Dyes are usually plasmatic stains.

(2) The action of stains is modified by Fixatives and Mordaunts.

(3) A Mordaunt is a substance which has the power of combining with certain tissue elements, and with the colouring principles of stains forming insoluble colour compounds called lakes, thus enabling tissues or certain of their elements to be acted upon by stains which have no power of directly combining with them.

METHODS OF STAINING.

(1) **Immersion**:—The prepared section being transferred to a watch glass or other suitable vessel containing the stain, and immersed in the fluid until the desired effect is produced.

2) **Transfusion**:—Prepared tissues which are not capable of transference from one vessel to another (*e.g.*, teased out Neumann's sheaths) being stained after mounting by passing the colouring agent beneath the cover-slip. The stain is applied to one side of the slip, and excess drawn away from the opposite side by means of blotting paper.

TABLE B.—STAINS.

NAME.	DESCRIPTION.	CHARACTER.	METHOD OF USE.	REMARKS.
CARMINE	An alum-lime salt of Carminic Acid obtained from Cochineal. Occurs as a distinctive bright red powder.	Nuclear and Plasmatic.	As an ingredient of Grenacher's Borax Carmine and Mayer's Carmalum *q.v.*	Used chiefly for staining tissues in bulk. *vide* Weil's process.
HÆMATOXYLENE	Colourless crystals obtained from Logwood.	Nuclear and Plasmatic.	As an ingredient of Ehrlich's Acid Hæmatoxylene and Benda's Iron Hæmatoxylene, etc.	Both Hæmatoxylene and Carmine are plasmatic stains except when used with a mordaunt, when they are powerful nuclear stains. The mordaunts chiefly used are salts of Calcium found in tap water, Alum and Iron salts.

NAME.	DESCRIPTION.	CHARACTER.	METHOD OF USE.	REMARKS.
NIGROSIN	Basic and Acid Aniline Dye.	Nuclear and Plasmatic.	Aqueous solution of various strengths.	Nigrosin is a name given to a series of acid and basic salts. The acid salts are most frequently employed.
CONGO RED	Acid Aniline Dyes.	Plasmatic.	Aqueous solution approximately 5%.	Weak acids strengthen the colour.
EOSINE				Useful counterstain after nuclear staining with Hæmatoxylene.
ORANGE				An ingredient of Ehrlich-Biondi Mixture
RUBIN				Ditto (Rubin = Acid Fuchsin)
PICRIC ACID			In dehydrating Alcohols.	Useful counterstain after nuclear staining with Carmine and Hæmatoxylene.

Name.	Description.	Character.	Method of Use.	Remarks.
BISMARCK BROWN	Basic Aniline Dyes.	Nuclear.	Aqueous or alcoholic solutions.	Also used for "intra vitam" staining.
FUCHSIN			Aqueous or alcoholic solutions.	Used largely in Ziehl's Carbol Fuchsin.
GENTIAN VIOLET			In aqueous solutions or in aniline water.	Largely used for differentiating bacteria by Gram's method.
METHYL GREEN			Aqueous solutions with a little Acetic Acid.	Of great value for fresh unfixed tissues.

NAME.	DESCRIPTION.	CHARACTER.	METHOD OF USE.	REMARKS.
METHYLENE BLUE	Basic Aniline Dye.	Stains nervous tissue, intercellular cement substance, lymph spaces, etc. Specific for medullated nerves	Aqueous solutions of various strengths, also in physiological salt solution for "intra-vitam" staining (about 1 in 1,000)	Being an unstable stain, it must be fixed with Picrate of Ammonium or Molybdate of Ammonium
GOLD CHLORIDE	Metallic Impregnation Stain	Specific for nervous tissue, nerve end organs and distribution of nerves	By reduction from neutral aqueous solutions (·5% to 1%) by various reagents as Formic Acid and Citric Acid	*vide* Underwood's and Mummery's methods. Useful for demonstrating the organic elements in dentine and cementum.

NAME.	DESCRIPTION.	CHARACTER.	METHOD OF USE.	REMARKS.
OSMIC ACID	Metallic Impregnation Stain	Specific for the sheaths of medullated nerves	Aqueous solution, 1%	Used also for differentiating spaces, as interglobular spaces in dentine.
PERCHLORIDE OF IRON	Metallic Impregnation Stain	Specific for nerve endings and peripheral distribution of nerves.	Aqueous solution, usually the British Pharmacopœia Liquor. By interaction with Tannic or Gallic Acids or Pyrogallol	*vide* Mummery's process.
SILVER NITRATE	Metallic Impregnation Stain	For intracellular substance. Has been used for the peripheral distribution of nerves	Reduction from the solid form or from aqueous solutions, ·2% to 1% by the action of reagents or light	Very weak solutions act as a general stain. Used extensively in Golgi's and Cajal's methods, *q.v.*

CLEARING.

CLEARING (including dealcoholisation) is the process by means of which the alcohol used in dehydration is removed from a tissue by some substance which

(1) Facilitates the penetration of the tissue by the medium to be employed for imbedding or mounting.

(2) By reason of its possessing a high refractive index, renders the sections transparent by penetrating amongst its elements.

Agent.	Refractive Index.	Remarks.
Oil of Bergamot	1·462	Greater transparency is obtained when the refractive index of the agent equals the refractive index of the tissue. Agents with lower refractive indices give less transparency but more detail. Agents with higher refractive indices give the reverse result. Most tissues after preparation have a refractive index slightly higher than Canada Balsam. Refractive index of Canada Balsam = 1·538. Refractive index of Crown Glass (cover slips) = 1·518. N.B.—Oil of Cloves dissolves Celloidin, so should not be used for Celloidin sections. Oil of Bergamot is recommended for clearing sections imbedded in Celloidin.
Oil of Turpentine	1·473	
Xylol	1·497	
Cedar Oil (Thick)	1·520	
Oil of Cloves	1·533	
Anilin Oil	1·580	
Oil of Cinnamon	1·619	

IMBEDDING.

	Definition.	Medium.	Method of Use.	Remarks.
IMBEDDING	The process by means of which the tissues are thoroughly saturated with some medium in such a manner that sections of the tissue may be cut without distortion or injury.	Paraffin. Approximately equal parts of Hard Paraffin — melting point 60° C. and Soft Paraffin—melting point 45° C.	Fusion.	The tissue is saturated with the medium which is liquid whilst warm, and solid when cold.
		Celloidin. A preparation of pure Pyroxylin, of various strengths; in solution of Alcohol and Methylated Ether.	Evaporation.	The tissue is saturated with the medium in solution, the menstruum allowed to evaporate or otherwise got rid of.
		Mucilage of Gum Acacia. Aqueous solution of Dextrin of equal consistence as Mucilage of Gum Acacia.	Freezing.	The tissue is saturated with the medium which is frozen hard by means of an ether spray.

SECTIONING.

The process by means of which tissues are cut in small suitably sized pieces, sufficiently thin, so as to make them available for microscopic examination.

Though sections may be cut by "free hand," a microtome is usually employed. There are many varieties of microtomes, and the reader is referred to the list of makers of these machines for their descriptions.

EXAMINATION AND PERMANENT MOUNTING MEDIA

Embrace all media in which an object may be examined and permanently mounted unless otherwise stated.

Medium.	Description.	Remarks.
NORMAL SALINE SOLUTION	Aqueous Solution of Sodium Chloride ·75%.	Not suitable for permanent mounting, but for examination of Enamel Prisms, Neumann's Sheaths, &c.
FARRANT'S SOLUTION	*vide* Formulæ—The formula varies slightly as used by different investigators.	Suitable for sections mounted direct from water or any aqueous medium.
GLYCERINE JELLY		
CANADA BALSAM	Solutions of various strengths in Xylol, Chloroform, Alcohol or Turpentine.	Previous to mounting, sections must be dehydrated and cleared with a few exceptions, *e.g.* Ground sections of teeth, demonstrating structures in the hard tissues, may be surface dried—by means of blotting paper—and mounted in thick balsam.

FORMULÆ AND SPECIAL PROCESSES

FIXATIVES.

Flemming's Solution.

Solution of Chromic Acid 1%	15·0 cubic centimetres
Solution of Osmic Acid 2%	4·0 cubic centimetres
Glacial Acetic Acid ...	1·0 cubic centimetres

Specially recommended for simultaneous hardening and decalcification of fœtal jaws, to demonstrate the development of teeth.

Freeborn's Solution.

Bichromate of Potash...	2·0 grammes
Sulphate of Soda ...	25·0 grammes
Solution of Formaldehyde 2%	100·0 cubic centimetres

As Müller's Fluid, but is more rapid in action. Both solutions possess great penetrating power and do not cause shrinkage of cells or fibrous tissue.

Müller's Fluid.

Bichromate of Potash...	2·5 grammes
Sulphate of Soda ...	1·0 gramme
Distilled Water ...	100·0 cubic centimetres

Suitable for fixing most of the soft dental tissues. Large quantities of the fluid should be used and must be changed on the 2nd, 4th, 7th and 14th days. The process usually takes 3 weeks.

Nitro-Chromic Acid Solution.

Chromic Acid	...	2·5 grammes
Nitric Acid ...	...	5·0 cubic centimetres
Distilled Water	...	500·0 cubic centimetres

As Flemming's Solution. Large quantities of fluid are used and changed at the end of 48 hours.

When the tissue is flexible it must be well washed in running water, and then neutralised by immersing in Solution of Bicarbonate of Soda, 1 drachm to 1 pint.

Weil's Process.

(*a*) Saturated Solution of Perchloride of Mercury, q.s.

(*b*) Alcohol, 30%, 50%, 70% $\overline{\text{aa}}$. q.s.

(*c*) Alcohol, 90% } q.s.
Iodine, 2%.

(*d*) Absolute Alcohol.

(*e*) Grenacher's Borax Carmine Solution q.s.

(*f*) 1% Solution of Hydrochloric Acid in Alcohol 70% q.s.

(*g*) Alcohol, 90%.

(*h*) Alcohol absolute.

(*i*) Oil of Cloves.

(*j*) Xylol.

(*k*) Chloroform.

(1) Pieces of fresh teeth or whole teeth with widely opened apices are fixed and hardened in (*a*) for from 6 to 8 hours.

(2) Wash out with (*b*) for 24 hours with each strength, then with (*c*) for 24 hours.

(3) Place in (*d*) until white, and wash in running water.

The teeth are stained in bulk.

(4) Immerse in (*e*) for from 3 to 7 days.

(5) Fix stain in (*f*) for from 12 to 36 hours.

(6) Dehydrate, by immersing in (*g*) 15 minutes (*h*) 30 minutes.

(7) Clear by immersing in Oil of Cloves for 12 hours.

(8) Wash in (*j*).

(9) Immerse in (*k*) until saturated.

A thin chloroform solution of Canada Balsam is then prepared and the specimens transferred to this. Dry powdered balsam is added a little at a time, until the chloroform will take up no more.

Place the teeth in a water bath at 90° C for 2 or 3 days, *i.e.*, until the balsam when cool cracks on the introduction of a needle point.

The teeth are now ready for grinding down into sections.

METHOD OF GRINDING DOWN HARD TISSUES.

(1) Grind pieces of tooth (or a whole tooth) as thin as possible by means of a rough and a fine corundum wheel on a dental lathe; keeping the wheel constantly wet with cold water.

(2) Rub down these sections with powdered pumice stone and water between sheets of ground glass.

(3) Polish sections by rubbing carefully on an Arkansas stone.

(4) Wash well in distilled water.

(5) Surface dry the sections by means of blotting paper and mount in thick Canada Balsam.

(6) Or dehydrate them with alcohol. Clear in oil of cloves, and mount in thin balsam.

*Hopewell-Smith's Method.

(*a*) Solution of Formaldehyde, 10% q.s.
(*b*) Flexile Collodion, q.s.
(*c*) Hydrochloric Acid, 10% 12 c.c.
(*d*) Nitric Acid, pure, 1·5 c.c.
(*e*) Nitric Acid, pure, 1·5 c.c.
(*f*) Solution of Bicarbonate of Soda, 5 grains to 1 oz. q.s.

A valuable method for the rapid decalcification of teeth, causing little or no distortion if carried out with care, and avoiding rapid changes of temperature.

DETAILS OF THE PROCESS.

(1) Place a newly extracted washed tooth, of which the apex has been widely opened into (*a*) for 7 days.
(2) Wash and dry the tooth, and seal the widely opened apical foramen with (*b*).
(3) Transfer to (*c*) for 15 hours.
(4) Add (*d*) to (*c*) having previously removed the tooth. Replace the tooth in (*c*) + (*d*) when the temperature has dropped to the normal, for 30 hours.
(5) Add (*e*) to (*c*) + (*d*) taking precaution as above and leave tooth in (*c*) + (*d*) + (*e*) until sufficiently soft for sectioning.
(6) Transfer tooth to (*f*) for half an hour.
(7) Remove Collodion, wash well in distilled water.

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* A modification recommended by the authors:—Mix together (*c*), (*d*), (*e*), adding to the solution 1% of Phloroglucin.

The tooth is then transferred to this solution after Step (*b*), and left until decalcified, Step (*f*) following.

Paul's Method.

(*a*) Phloroglucin ... 1 gramme
Nitric Acid, pure... 10 cubic centimetres
Nitric Acid 10% ... 100 cubic centimetres

Mix.

(*b*) Solution of Bicarbonate of Soda 5 grains to 1oz. q.s.

A valuable method for rapidly decalcifying enamel, and separating Nasmyth's membrane from a tooth, without injuring its cellular elements.

Phloroglucin has a protective function, and is not itself a solvent of calcific salts. It protects the organic elements of the membrane against the action of the mineral acid.

DETAILS OF THE PROCESS.

(1) Place a recently erupted or unerupted washed tooth in (*a*) for a few minutes, or until the membrane shows signs of separating from the crown.

(2) Wash in distilled water.

(3) Transfer to (*b*) until bubbling ceases.

(4) Separate membrane from the tooth, and wash in distilled water for a few minutes.

(5) Stain, counter stain and mount.

Beckwith's Gold Stain.

Mummery's Modification.

(*a*) Solution of Chloride of Gold, 1% q.s.

(*b*) Solution of Hydrate of Soda, 20% q.s.

(*c*) Solution of Carbonate of Potash, 10% q.s

(*d*) Solution of Iodide of Potash, 10% q.s.

By means of this method of staining Mr. Mummery has been able to successfully demonstrate the presence of nerve fibrils penetrating the dentine arising from a marginal plexus on the dentine side of the odontoblast cells.

DETAILS OF THE PROCESS.

(1) Place the sections in solution (*a*) for half-an-hour.

(2) Wash for a few moments in distilled water.

(3) Transfer to Solution (*b*) for three minutes.

(4) Transfer to Solution (*c*) for half-an-hour.

(5) Drain.

(6) Transfer to Solution (*d*) for from ten to fifteen minutes.

(7) Wash in distilled water.

Cajal's Silver Stain.

(*a*) Alcohol, 50%, to which is added a few drops of Liquid Ammonia, q.s.

(*b*) Alcohol Absolute, q.s.

(*c*) Solution of Nitrate of Silver, 1·5% q.s.

(*d*)	Hydrokinone ...	1·5 grammes.
	Solution of Formaldehyde, 40% ...	5 cubic centimetres
	Rectified Spirit ...	10 cubic centimetres
	Distilled Water ...	100 cubic centimetres

Mix

This method of staining is recommended by Mr. Mummery to demonstrate the peripheral distribution of the nerves of the dental pulp.

DETAILS OF THE PROCESS.

(1) Place small pieces of decalcified tooth, not more than 4 mm. thick, in (*a*) for from four to six hours.

(2) Transfer to (*b*) for twenty-four hours.

(3) Wash in distilled water for a few minutes.

(4) Transfer to Solution (*c*) kept at a temperature of 37·5° C. for from five to six days.

(5) Transfer to Solution (*d*) for twenty-four hours.

(6) Wash in distilled water for a few minutes.

(7) Cut sections and mount.

Charters-White's Celloidin-Fuchsin.

(*a*) Absolute Alcohol, q.s.

(*b*) Ether, q.s.

(*c*) Absolute Alcohol ... 10 cubic centimetres
to which is added fuchsin until a dark port-wine colour is produced.
Ether ... ... 30 cubic centimetres
Celloidin, q.s., to make a thin syrupy Solution.

An excellent method of demonstrating internal cavities and spaces in bone and teeth.

DETAILS OF THE PROCESS.

(1) Place ground sections, about 1/16 in. in thickness, in (*a*) for five minutes.

(2) Transfer to (*b*) for five minutes.

(3) Transfer to (*c*) for seven days.

(4) Remove from (*c*), allow to dry by evaporation, and complete the process of grinding.

Delafield's Hæmatoxylene.

Hæmatoxylene ...	4 grammes.
Absolute Alcohol ...	25 cubic centimetres
Saturated Solution of Ammonia Alum ...	400 cubic centimetres

Mix. Expose to light and air for 3 days, filter and add

Glycerine	100 cubic centimetres
Methylic Alcohol ...	100 cubic centimetres

This stain is recommended as being the most powerful and reliable of the hæmatoxylene formulæ.

It is preferable to dilute the solution with distilled water (1 part to 3 parts of water) immediately before use.

Hæmatoxylene solutions may be used both as a nuclear and plasmatic stain. If it is desired to stain nuclei only, the sections must be left in the stain for from 4 to 10 minutes (according to the strength of the Hæmatoxylene solution) and a mordaunt used to fix the stain. If employed as a plasmatic stain, the sections are immersed in it for from 12 to 24 hours, and no mordaunt is required.

Ehrlich's Acid Hæmatoxylene.

Hæmatoxylene	2 grammes
Glacial Acetic Acid	10 cubic centimetres
Glycerine	100 cubic centimetres
Absolute Alcohol	100 cubic centimetres
Distilled Water	100 cubic centimetres
Alum, in excess.	

Mix, and allow to stand in the light until the solution becomes dark red in colour.

Recommended as the most useful nuclear stain for the dental tissues.

Diluted about 1 part to 3 parts of distilled water, an immersion of about 4 minutes is sufficient to stain nuclei. A mordaunt (tap-water) must be used to fix the stain.

See Delafield's Hæmatoxylene.

Ehrlich-Biondi Mixture.

Saturated Solution of Orange Acid Anilin,	100 cubic centimetres
,, ,, Rubin Acid Anilin,	20 cubic centimetres
,, ,, Methyl Green Basic Anilin,	50 cubic centimetres

Mix little by little with constant shaking.

Recommended as a useful differential stain for developmental tissues.

Golgi's Silver Stain.

(*a*) Solution of Bichromate of Potash 2% ...	8 cubic centimetres
Solution of Osmic Acid 1% ...	2 cubic centimetres
Mix.	
(*b*) Solution of Nitrate of Silver 5% ...	q.s.

Recommended for staining axis cylinders of nerves, protoplasmic nerve cell processes, and the organic constituents of dentine and cementum.

DETAILS OF THE PROCESS.

(1) Place fresh sections in (*a*) for from 3 to 4 days.
(2) Transfer to (*b*) for 24 hours.

Gram's Stain.

(*a*) Aniline Gentian Violet	q.s.
(*b*) Iodine	1 gramme
Iodide of Potassium	2 grammes
Distilled Water ...	300 cubic centimetres
(*c*) Alcohol Absolute...	q.s.

A valuable differential stain for bacteria, and used largely in demonstrating their presence in caries of the dental tissues.

DETAILS OF THE PROCESS.

(1) Immerse in (*a*) for from 1 to 4 minutes.
(2) Drain off excess of the stain.
(3) Immerse in (*b*) for 1 to 4 minutes.
(4) Wash off with (*c*) until all excess of stain is removed.

Grenacher's Borax Carmine.

Borax	4 grammes
Carmine	2·5 grammes
Distilled Water ...	100 cubic centimetres

Boil for 45 minutes, add an equal volume of Alcohol, 70%

Set aside, decanter and filter.

Recommended for staining in bulk, and is an agent employed in Weil's process, *q.v.* This stain must be fixed by means of a dilute acid. The usual method for fixing is to transfer the preparations direct from the staining bath into alcohol 70%, acidulated with Hydrochloric Acid, approximately 5 drops of pure acid being added to 100 cubic centimetres of Alcohol.

Iron Hæmatoxylene (Benda).

(*a*)	Sulphate of Iron ...	80 grammes
	Distilled Water ...	40 cubic centimetres
	Sulphuric Acid ...	15 cubic centimetres
	Nitric Acid	18 cubic centimetres

Mix.

(*b*) Solution of Hæmatoxylene, 1% q.s.

(*c*) Solution of Acetic Acid, 10% q.s.

Useful as an alternative method to Iron and Tannin, *q.v.*

DETAILS OF THE PROCESS.

(1) Place sections in (*a*) diluted 1 part to 2 parts of distilled water for 24 hours.
(2) Wash in distilled water.
(3) Wash in tap water.
(4) Transfer to (*b*) until black.
(5) Transfer to (*c*) until required differentiation is obtained.
(6) Wash in distilled water.

Iron and Tannin.

(*a*) Solution of Perchloride of Iron, 4%.
(*b*) Solution of Tannic Acid, 4%.

Recommended for staining decalcified sections of teeth, with the dental pulp "in situ" to demonstrate its nervous elements—the marginal plexus, and and the neuro-fibrils running in the dentinal tubules.

DETAILS OF THE PROCESS.

(1) Place the sections in (*a*) for twenty-four hours.
(2) Wash in distilled water.
(3) Transfer to (*b*) until black.
(4) Wash in distilled water.

Mayer's Carmalum.

Carmine	1 gramme
Alum (Potash)	10 grammes
Distilled Water	200 cubic centimetres

Dissolve, and filter, and add 1% of Salycylic Acid to preserve the solution.

See Grenacher's Borax Carmine.

Preparations of alum-carmine are said to have a destroying action on calcareous structures. Their use, therefore, in sections of dentine is contra-indicated.

Picro-Carmine Stain.

MILLER'S METHOD.

(*a*) Solution of Carmine concentrated, q.s.

(*b*)

Alcohol	70 parts
Hydrochloric Acid ..	1 part
Water	29 parts

Mix.

(*c*) Absolute Alcohol, q.s.

Coloured yellow by the addition of a sufficient quantity of Picric Acid.

Recommended for staining ground sections of a carious tooth, the bacteria present being stained light red, dentinal fibrils light red, dentinal matrix pink, and the decomposing parts yellow.

DETAILS OF THE PROCESS.

(1) Immerse sections in (*a*) for 15 minutes.

(2) Transfer to (*b*) for from 15 minutes to 5 hours.

(3) Dehydrate in (*c*).

Underwood's Gold Chloride.

(*a*) Solution of Bicarbonate of Soda, 1% q.s.

(*b*) Neutral Solution of Chloride of Gold, 1% q.s.

(*c*) Solution of Formic Acid, 1% q.s.

A valuable stain.

Recommended for differentiating the course of nerve fibres, and the organic constituents of dentine and cementum.

DETAILS OF THE PROCESS.

(1) Place decalcified sections of a tooth in (*a*) for 2 minutes.

(2) Transfer to (*b*) for 45 minutes.

(3) Wash in distilled water.

(4) Transfer to (*c*) in a water bath, at a temperature not exceeding 60° C for 1 hour, or until the sections become crimson.

(5) Wash in distilled water for 1 hour.

N.B.—(2), (3), (4) must be carried out in in the dark.

Ziehl's Carbol-Fuchsin.

Fuchsin	1 gramme
Pure Carbolic Acid	5 grammes
Alcohol	10 grammes
Distilled Water	100 cubic centimetres

Used to stain bacteria present in caries of the dental tissues.

Celloidin.

(*a*) Absolute Alcohol q.s.

(*b*) Absolute Alcohol 50 cubic centimetres
Ether ... ... 150 cubic centimetres

Mix.

(*c*) Solution (*b*) q.s. and add Celloidin, q.s. to make a liquid of a thin syrupy consistence.

(*d*) Solution (*b*) q.s. and add Celloidin, q.s. to make a liquid of a thick syrupy consistence.

(*e*) Chloroform.

N.B.—Celloidin sections may be stained "en masse" before (5) (clearing with Oil of Bergamot) or after sectioning.

Recommended for its equal uniformity of permeation and penetrative power, and for use for imbedding developmental, and other fragile tissues.

DETAILS OF THE PROCESS.

(1) Place the preparation in (*a*) for 24 hours.

(2) Transfer to (*b*) for 24 hours.

(3) Transfer to (*c*) for 7 days (approx.)

(4) Transfer to (*d*) for 4 days (approx.)

(5) Imbed the preparation in a fresh quantity of (*d*), allow to evaporate for a few moments, and complete hardening of the celloidin block by immersing in (*e*) for from 24 to 48 hours.

Mucilage of Acacia.

Gum Acacia, small picked pieces	4 ounces
Distilled Water	6 fluid ounces

Allow to stand in a suitable covered vessel, stir frequently until solution is effected. Strain through muslin and add

Liquid Carbolic Acid...	10 drops.

The most extensively used imbedding medium for the dental tissues.

The prepared specimen is transferred to a suitable vessel containing a sufficiency of the Mucilage. The impregnation of the specimen is indicated by its sinking to the bottom of the vessel.

Sections are cut on an Ether freezing microtome.

Solution of Dextrine.

Dextrine	q.s.
Solution of Carbolic Acid, 1 in 40 ...	6 fluid ounces

The dextrine to be added to the solution until a thick liquid of the consistence of Mucilage is obtained.

Used by many investigators in place of Mucilage of Acacia.

Paraffin.

(*a*) Absolute Alcohol, q.s.

(*b*) Chloroform, q.s.

(*c*) Hard Paraffin, melting point 45° to 50°C., q.s.

An essential method for the preparation of serial sections.

DETAILS OF THE PROCESS.

(1) After preparation of the tissue it is dehydrated in (*a*) for 24 hours.
(2) Place in (*b*) until saturated.
(3) Transfer to successive baths of melted (*c*) until thoroughly impregnated, and all (*b*) is removed.
(4) Allow the Paraffin containing the specimen to cool and trim into suitably sized rectangular block for the Cambridge rocking microtome on which sections are cut.

The further manipulation of sections is carried out on the slides, on to which sections are floated from warm water. The slides are smeared with egg albumen, to facilitate and ensure attachment of the sections.

Dry the slides with blotting paper and immerse in Xylol, to remove all Paraffin.

Transfer to Alcohol absolute, 70%, 50%, 30%.

Stain, dehydrate, clear and mount in balsam.

Farrant's Medium.

Picked Gum Arabic
Glycerine
Saturated Aqueous Solution of Arsenious Acid
Water.
} equal parts of each.

Mix.

Used to mount sections direct from aqueous media.

Not to be used for sections stained by any of the aniline dyes.

Glycerine Jelly.

French Gelatine ...	1 ounce
Glycerine	4 ounces
Chloroform Water ...	6 ounces

Soak the gelatine until soft in a portion of the Chloroform Water, add the glycerine and heat gently until solution is effected. Stir in the remainder of the water.

For sections mounted direct from aqueous media.

It is necessary to slightly warm the medium, the slide, and cover-slip.

METHODS OF DEMONSTRATING THE HISTOLOGICAL STRUCTURE OF THE DENTAL TISSUES.

Name.	Methods of Preparation.	Agents Employed for		
		(a) Imbedding	(b) Staining.	(c) Mounting.
ABSORBENT ORGAN				
(*a*) detached	Wash in salt solution (*a*) fix in Müller's fluid for 7 days, and harden in alcohol for 14 days or (*b*) fix and harden in solution of formaldehyde 10% for 7 days	Celloidin Paraffin	Ehrlich's Acid Hæmatoxylene Counterstain Eosine	Canada Balsam
(*b*) in sitû	(*a*) Weil's process (*b*) Author's modification of Hopewell-Smith's process	Mucilage of Acacia or solution of Dextrine	Ehrlich's Acid Hæmatoxylene Counterstain Eosine	Canada Balsam
BONE, ALVEOLAR				
(*a*) with tooth and soft tissues in situ	(*a*) Hopewell-Smith's process, or author's modification	Mucilage of Acacia or solution of Dextrine	Fuchsin or Ehrlich's Acid Hæmatoxylene Counterstain Eosine	Canada Balsam

NAME	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING.	(c) MOUNTING.
(*b*) detached from soft tissues	Grinding down.	Nil	Charters White's Celloidin-Fuchsin	Canada Balsam
CARIES OF (*a*) Nasmyth's Membrane	Paul's Method.		Carbol Fuchsin or Gram's Stain	Canada Balsam
(*b*) Enamel	Immerse a recently extracted carious tooth in solution of Formaldehyde 2% for 2 days, complete by the grinding down process.	Nil	No stain essential but Carbol Fuchsin or Picro-Carmine or Gram's Stain may be used	Canada Balsam

NAME.	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING	(c) MOUNTING.
CARIES—*contd.* (*c*) Dentine	(*a*) Remove a piece of softened carious dentine from a tooth by means of an excavator	Mucilage of Acacia or Solution of Dextrine	Carbol Fuchsin or Gram's Stain	Canada Balsam
	or			
	(*b*) Grinding down	Nil	Picro-Carmine, or Carbol Fuchsin or Gram's Stain	Canada Balsam
	or			
	(*c*) Weil's process.	Nil		
(*d*) Cementum	Decalcify by immersing a tooth in Solution of Hydrochloric Acid 10% for several days, or until sufficiently softened—neutralise.	Mucilage of Acacia or Solution of Dextrine	Carbol Fuchsin or Gram's Stain	Canada Balsam
CEMENTUM	(*a*) Grinding down	Nil	Charters White's Celloidin-Fuchsin or Golgi's Stain	Canada Balsam
	or			

NAME.	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING.	(c) MOUNTING.
CEMENTUM —*contd.*	(*b*) Decalcification with Chromic Acid in combination with Hydrochloric Acid 1% and subsequent neutralisation with solution of Bicarbonate of Soda.	Mucilage of Acacia or Solution of Dextrine	Underwood's Gold Chloride or Iron and Tannin	Farrant's Medium
DENTINE	(*a*) Grinding down	Nil	Charters White's Celloidin-Fuchsin, or Golgi's Stain	Canada Balsam
	or			
	(*b*) Hopewell-Smith's Method	Mucilage of Acacia or Solution of Dextrine	Ehrlich's Acid Hæmatoxylene	Canada Balsam
	or		or	
	(*c*) Decalcification with Chromic Acid in combination with Hydrochloric Acid 1% and subsequent neutralisation with solution of Bicarbonate of Soda		Underwood's Gold Chloride	Farrant's Medium
			or	
			Mummery's Gold Chloride	Farrant's Medium
			or	
			Cajal's Silver	Farrant's Medium
	or		or	
			Iron and Tannin	Canada Balsam
	(*d*) Weil's process.	Nil		Canada Balsam

NAME.	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING.	(c) MOUNTING.
DEVELOPMENTAL TISSUES (Soft)	(*a*) Fix in Müller's Fluid, Harden in Alcohol or	Mucilage of Acacia	Ehrlich-Biondi Mixture	Canada Balsam
	(*b*) Fix and harden in Formaldehyde Solution 10% or	Mucilage of Acacia	Ehrlich-Biondi Mixture	Canada Balsam
	(*c*) Fix and harden in Freeborn's Solution or	Mucilage of Acacia, Celloidin, or Paraffin	Ehrlich-Biondi Mixture	Canada Balsam
	(*d*) Fix and harden in Solution of Perchloride of Mercury and Alcohol.		Borax Carmine in bulk	Canada Balsam
Ditto, (Hard and Soft)	(*a*) Fix, harden and decalcify in			
	(1) Nitro-Chromic Acid Solution or	Mucilage of Acacia	Ehrlich-Biondi Mixture	Canada Balsam
	(2) Flemming's Solution for 24 hours, followed by 24 hours in several strengths of Alcohol, 70%, 80%, 90%, or (*contd.*)	Mucilage of Acacia	Ehrlich-Biondi Mixture	Canada Balsam

NAME.	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING.	(c) MOUNTING.
DEVELOPMENTAL TISSUES (Hard and Soft)—*contd.*	(*b*) Fix and harden in Solution of Perchloride of Mercury and Alcohol. Decalcify in Solution of Hydrochloric Acid, 10%.	Paraffin	Ehrlich - Biondi Mixture or Borax Carmine in bulk	Canada Balsam
ENAMEL	(*a*) Grinding down.	Nil.	Nil.	Canada Balsam
	(*b*) Grinding down and immersion of one side only of the section in Solution of Hydrochloric Acid for a few minutes, and neutralisation with weak Solution of Ammonia. (To protect the second surface of the section from the action of the acid smear over with vaseline).	Nil.	Nil. or Charters White's Celloidin Fuchsin	Canada Balsam

NAME.	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING.	(c) MOUNTING.
ENAMEL PRISMS	Immerse a tooth in 12c.cs. Solution of Hydrochloric Acid, 10% for 30 hours. Remove from the acid solution, neutralise with solution of Bicarbonate of Soda, and wash. Place a small portion of softened enamel on a clean slide, and tease out the prisms.	Nil	Rubin by transfusion and Washing away excess with Acetic Acid, 10%	Normal Saline Solution
FOLLICLE, DENTAL (*a*) In sitû	*vide* Developmental Tissues.			
(*b*) Detached from around developing permanent tooth	Solution of Formaldehyde 10%, for 7 days.	Mucilage of Acacia.	Ehrlich's Acid Hæmatoxylene or Delafield's Hæmatoxylene.	Canada Balsam

Name.	Methods of Preparation.	Agents Employed for		
		(a) Imbedding.	(b) Staining.	(c) Mounting.
GUBERNACULUM	*vide* Follicle.			
GUM (*a*) Detached	Fix and harden in (*a*) Solution of Formaldehyde 10%, about 7 days or (*b*) Müller's Fluid.	Mucilage of Acacia or Solution of Dextrine.	Erhlich's Acid Hæmatoxylene or Delafield's Hæmatoxylene and Counterstain Eosine.	Canada Balsam
(*b*) In sitû	(*a*) Hopewell-Smith's Process or (*b*) Author's Modification of Hopewell-Smith's Process.	Mucilage of Acacia or Solution of Dextrine.	Erhlich's Acid Hæmatoxylene or Delafield's Hæmatoxylene and Counterstain Eosine.	Canada Balsam
JAW, FŒTAL	*vide* Developmental Tissues.			

Name	Methods of Preparation.	Agents Employed for		
		(a) Imbedding.	(b) Staining.	(c) Mounting.
JAW, ADULT	*vide* Bone. Solution of Chromic Acid 5% in combination with Solution of Hydrochloric Acid 1%. Wash and neutralize when soft.	*vide* Bone	*vide* Bone.	Canada Balsam
NASMYTH'S MEMBRANE	(*a*) Paul's Method.	Nil	Ehrlich's Acid Hæmatoxylene and Counterstain Eosine.	Canada Balsam
	(*b*) Separate Membrane by immersing a newly erupted and recently extracted tooth in 10% solution of Hydrochloric Acid for 2½ hours. Neutralise in solution of Bicarbonate of Soda and wash in distilled water.	Nil	Ehrlich's Acid Hæmatoxylene and Counterstain Eosine.	Canada Balsam

NAME.	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING.	(c) MOUNTING.
NERVES OF THE DENTAL PULP	Harden a removed pulp in solution of Osmic Acid 1% for 24 hours in the dark. Wash in distilled water. *vide* Pulp in sitû	Mucilage of Acacia or Solution of Dextrine	The Osmic Acid stains the medullated nerve bundles.	Farrant's Medium or Canada Balsam
NEUMANN'S SHEATHS				
(*a*) Detached	Place broken pieces of tooth in 12 c.cs. of solution of Hydrochloric Acid 10% for 3 days. Remove and repeat with a fresh solution of the same strength for 2 days, and then add 5 c.cs. of Nitric Acid, and leave until the sheaths settle to the bottom of the container as a mucoid deposit. Tease out the sheaths on a slide.	Nil.	Borax Carmine or Nigrosin by transfusion, washing away excess with 1% Acetic Acid.	Normal Saline Solution.
(*b*) In sitû	Weil's Process.	Nil.	Golgi's Stain or Nigrosin.	Canada Balsam

NAME.	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING.	(c) MOUNTING.
PERIODONTAL MEMBRANE				
(*a*) Detached	Solution of Formaldhyde 10% for 7 days.	Mucilage of Acacia or Solution of Dextrine.	Ehrlich's Acid Hæmatoxylene and Counterstain Eosine.	Canada Balsam
(*b*) In sitû	Hopewell-Smith's Process or author's Modification.	Mucilage of Acacia or Solution of Dextrine.	Ehrlich's Acid Hæmatoxylene and Counterstain Eosine.	Canada Balsam
(*c*) Chronic Abscess of, in sitû	(as *b*).	(as *b*).	(as *b*).	
PULP, DENTAL				
(*a*) Detached	(*a*) Solution of Formaldehyde, 10% for 7 days or (*b*) Solution of Osmic Acid, 1% for 24 hours in the dark.	Mucilage of Acacia or Solution of Dextrine.	Delafield's Hæmatoxylene and Counterstain Eosine.	Canada Balsam Farrant's Medium

NAME.	METHODS OF PREPARATION.	AGENTS EMPLOYED FOR		
		(a) IMBEDDING.	(b) STAINING.	(c) MOUNTING.
PULP—(*contd.*)	Weil's Process.		Metallic Impregnation Stains as below.	Canada Balsam
(*b*) In sitû	Hopewell-Smith's process or author's modification.	Mucilage of Acacia or Solution of Dextrine.	Ehrlich's Acid Hæmatoxylene and Counter Stain Eosine, or Iron and Tannic Acid, or Underwood's Gold Stain, or Mummery's Gold Stain, or Iron Hæmatoxylene Benda, or Cajal's Silver Stain.	Canada Balsam or Farrant's Medium

N.B.—In all cases where Canada Balsam is used for mounting, sections should be always dehydrated and cleared.

PART V.

GLOSSARY

OF TERMS USED IN THIS HANDBOOK.

GLOSSARY

OF TERMS USED IN THIS HANDBOOK.

Abrasion.—An injury in which tooth substance is worn away by means of a foreign body.

Abscess.—A more or less circumscribed accumulation of pus, contained in a cavity which is formed by the disintegration and distension of the tissues due to the suppurative process.

Acicular.—Needle-shaped.

Acromegaly.—A disease, characterised by a chronic, symmetrical enlargement of the bones, and soft parts of the extremities, and of the lower jaw, lips, and tongue.

Actinomycosis.—An infectious disease due to the presence of the Ray Fungus (Streptothrix Actinomyces).

Alkaloid.—A nitrogenous principle, of alkaline reaction, and basic properties, occurring in vegetable tissues or juices.

Amorphous.—Non-crystalline, exhibiting no fixed or definite shape.

Anhydrous.—Free of water.

Artefact.—A change produced in a tissue by manipulation.

Arthritis.—An acute or chronic inflammation of a joint.

Attrition.—A wearing away of tooth substances by an opposing tooth or teeth.

Bromism.—A series of symptoms produced by the administration of bromides.

Cachet.—A rice paper container used for the administration of drugs in powder form.

Cachexia.—A profound state of constitutional derangement due to the action of a disease or poison, which seriously interferes with metabolism.

Calcination.—The subjecting of a substance to the action of fire, to deprive it of moisture and of volatile and combustible constituents.

Calculus.—A morbid concretion, of a hard or stony consistence.

Caries.—Destruction of tooth substances, due to the action of acid forming, and peptonising bacteria.

Cellulitis.—Inflammation of the loose subcutaneous connective tissue and fascia.

Chromatin.—The network pervading the substance of cell nuclei, and so called because readily and deeply coloured by stains.

Coalescent.—Adhering together in one body or mass.

Collapse.—A condition of lowered vitality resulting from a fall in blood pressure, due to escape of blood from the vessels.

Concussion.—The disturbance effected in a part, by the mere shock of a blow or other injury, apart from any lesion discoverable by inspection.

Corrosive.—That which has the property of destroying by eating away gradually, usually by means of chemical interaction.

Cyst.—An abnormal growth, consisting of a cavity closed in on all sides by a definite wall, and containing a fluid or semi-fluid substance.

Decoction.—A preparation obtained by boiling a vegetable substance in water and straining the product.

Deliquescent.—Having the property of absorbing moisture from the air and gradually assuming the liquid state.

Depletion.—The act or process of diminishing the quantity of blood in the vessels.

Detergent.—Cleansing.

Diathesis.—A condition of the system which renders it particularly liable to certain diseases.

Dyspepsia. — Impairment of digestion due to functional derangement of the stomach or intestines.

Efflorescent.—Liable to spontaneous loss of water of crystallisation, and so becoming covered with, or converted into, a whitish powder.

Elutriation.—The process of separating the light and heavy particles of a mixed insoluble powder by agitation with water, and subsequent decantation of the supervalent liquid from the heavier particles.

Empyæma.—An accumulation of pus in a natural cavity of the body.

Empyreumatic.—Having the smell of slightly burnt animal or vegetable substances.

Emulsion.—A more or less thick liquid, having fine particles of the active ingredient suspended in it, either by mechanical or chemical means.

Erosion.—A gradual destruction of tooth substance caused by chemical and mechanical agencies.

Etiology.—The causation of a disease.

Exanthemata.—A febrile disease attended with a distinctive eruption on the skin that takes a definite time to develope and run its course.

Excipient.—An ingredient of a formula which is responsible for the consistence of the finished product.

Fistula.—An abnormal suppurating canal, lined with a smooth membrane, and having an opening at both ends.

Fluoresence.—A peculiar blue appearance caused by the conversion of invisible rays of light into visible rays.

Gangrene.—Death of a part "en masse." Applied particularly to soft tissues.

Gingivitis.—Inflammation of the gums.

Glossitis.—Inflammation of the tongue.

Hæmophilia.—Constitutional tendency to hæmorrhage.

Hæmorrhage.—Bleeding. An escape of blood from the vessels.

Hydragogue.—Having the property of absorbing water from the circulatory fluids.

Hydrolysis.—Chemical decomposition in which a substance splits up, after taking up one or more molecules of water.

Hygroscopic.—Having the property of absorbing moisture from the atmosphere.

Hyperæmia.—Excess of blood in a part, either due to increased inflow or obstructed outflow.

Hyperplasia.—Increase in size or mass of a part, by the development in it of new tissue.

Hypersensitive.—Marked by a condition of excessive sensibility.

Hypertrophy.—Increase in size or mass of a part, by the overgrowth or increase in number of the component elements of the part.

Hysteria.—A nervous disorder occurring in paroxysms, and simulating other diseases.

Immunity.—Exemption from disease.

Impalpable.—Not distinguishable to touch.

Indolent.—Having but little tendency to advance or recede.

Inflammation.—A series of changes which takes place in a living tissue when it is injured—provided that the injury is not of such a degree as to at once destroy its vitality or structure—and is the local attempt at repair of actual or referred injury.

Infusion.—A preparation obtained by pouring boiling, hot or cold water on to a vegetable substance and allowing it to stand in a covered vessel for a definite period of time.

Inhibition.—Restraint put upon the action of an organ through the agency of the nervous system.

Iodism.—A series of symptoms produced by the application or administration of Iodine and Iodides.

Irrigation.—The act of washing out a cavity by a stream of water, or a medicament in solution.

Isomeric.—Having the same elements in the same proportions, but different properties.

Isotonic.—Having the same specific gravity.

Leukoplakia.—A formation on the buccal mucous membrane, more particularly the tongue, of hyperæmic areas, which subsequently become covered by bluish-white patches of thickened epithelium.

Maceration.—The act of softening, disintegrating, or dissolving the whole or part of a substance by soaking it in a fluid.

Maturation.—The state of ripening, of an inflammatory swelling, the formation of pus.

Migraine.—A paroxysmal nervous disorder associated with severe headache, frequently commencing with visual disturbances and terminating with sensory disturbances, nausea and vomiting.

Monoclinic.—Crystals having three axes, which may be all unequal; two of these are placed at right angles, the third being so inclined, as to be oblique to one and perpendicular to the other.

Nascent.—Beginning to exist. Of an element, which having been just freed from chemical combination, exerts an unusually energetic chemical action.

Necrosis.—Death of a part "en masse." Applied particularly to bone.

Neuralgia.—Pain in the course or distribution of a nerve, and named according to the part occupied.

Obtundent.—An agent which deadens excessive sensibility.

Odontalgia.—Pain in a tooth, which may be either local or referred.

Percolation.—The process of exhausting a powdered drug by passing a fluid through it.

Periodontitis. — Inflammation of the "membrane," which intervenes between the external surface of the root of a tooth, and its bony socket.

Peripheral; of nerves, relating to their ultimate distribution.

Polymer.—A substance composed of the same elements, but in multiple proportions, and having different properties.

Polypus.—A smooth pedunculated growth, arising from the mucous or sub-mucous tissue.

N.B.—Polypus of the pulp or gum are more correctly described as hyperplasia, and hypertrophy respectively.

Ptyalism.—Excessive secretion of the salivary glands.

Pulpitis.—Inflammation of the dental pulp, *i.e.*, the internal vascular soft tissue of the tooth popularly known as the nerve.

Purpura.—A disease in which hæmorrhagic patches form upon the skin or mucous membranes.

Pyorrhœa Alveolaris.—Discharge of pus from the tooth socket. This term is loosely applied to the series of symptoms and conditions associated with Chronic General Periodontitis.

Refractive Index.—When a ray of light passes from air through a substance it is deviated from its course. The ratio between the sine of the angle made by the entering ray and the surface of the substance, and the sine of the angle made by the deviated ray and the surface of the substance is the refractive index.

Resolution.—A process of complete recovery.

Rheumatoid Arthritis.—A chronic articular rheumatism.

Rhinitis.—Inflammation of the mucous membrane of the nasal fossæ.

Rhombic.—Having four equal sides but unequal angles.

Rickets.—An affection characterised by retarded ossification, over-production of cartilage in and about the bones, and general thickening of membranes.

Salivation.—Excessive secretion of the salivary glands.

Sepsis.—A general term indicating that a part has become infected with pus forming bacteria.

Shock.—A condition of lowered vitality resulting from a fall in blood pressure, due to exhaustion of the vaso-motor centre by the severity, number, or duration of different impulses reaching it from the area of injury.

Stearoptene.—The solid constituent of a volatile oil.

Stomatitis.—Inflammation of the buccal mucous membrane.

Sublimation.—The act of refining by bringing a solid substance to a state of vapour and condensing it.

Suppuration.—The process of forming or discharging pus.

Syncope.—A state of lowered vitality, resulting from a fall in blood pressure, due to the failure of the heart's action.

Synthesis.—The building up of a chemical compound from its constituents.

Tartar.—A mass of organic and inorganic matter deposited on the teeth.

Thrombosis.—Intravascular coagulation in any part of the circulatory system.

Traumatic.—Produced by injury.

Vesicant.—A blistering agent.

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